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STATE OF MICHIGAN

EIGHTEENTH ANNUAL REPORT

OF THE

BUREAU OF LABOR

AND

INDUSTRIAL STATISTICS

UNDER DIRECTION OF
JOSEPH L. COX
COMMISSIONER OF LABOR

JOHN HOLBROOK
DEPUTY COMMISSIONER



BY AUTHORITY



1901
WYNKOOP HALLENBECK CRAWFORD COMPANY, OF LANSING, MICH.
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STATE OF MICHIGAN.

SCOTT GRISWOLD,
COMMISSIONER.
MALCOLM J. MCLEOD,
DEPUTY COMMR.

AND
FACTORY INSPECTION.

Lansing, Mich., May 1, 1901.

DEAR SIR:—

The undersigned take pleasure in forwarding to you a copy of the Eighteenth Annual Report of the Bureau of Labor, prepared under the supervision of J. L. Cox, late Commissioner of Labor, accompanied by the compliments of the present officers of the Bureau.

As the statistics contained in this report have been carefully gathered and arranged, we trust they may prove of interest to you, and respectfully ask a careful perusal of its contents on your part. The index, which is very complete, will make the location of any desired information an easy task.

Hoping the report may be of value to you and worthy of your consideration, we remain,

Respectfully yours,

MALCOLM J. MCLEOD,

SCOTT GRISWOLD,

Deputy Commissioner of Labor.

Commissioner of Labor.

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LETTER OF TRANSMITTAL.

STATE OF MICHIGAN,
BUREAU OF LABOR AND INDUSTRIAL STATISTICS, }
Lansing, February 1, 1901.

TO HIS EXCELLENCY, HON. AARON T. BLISS, *Governor of Michigan:*

Dear Sir—In compliance with the statute creating the Bureau of Labor and Industrial Statistics and defining the duties of the Commissioner of Labor, I herewith submit for your most honored consideration my Fourth Annual Report, which in the regular files of the department will be known as the Eighteenth Annual Report of the Bureau of Labor and Industrial Statistics, with Appendix of Factory Inspection.

By virtue of my appointment as Commissioner of Labor it is also my duty to serve the State in the capacity of chief factory inspector as authorized by special act. I herewith submit the Eighth Annual report of the work done in this important branch of the bureau and I have placed the copy for said reports in the hands of the State printers for duplication, in print as authorized by law. The printed reports will soon be ready for Your Excellency and the public.

Fully aware that my successor will soon assume the duties and requirements of the office of Commissioner of Labor, I herewith most respectfully proffer to both Your Excellency and the new Commissioner my kindest regards and well wishes for the new administration.

Yours most respectfully,

JOSEPH L. COX,

COMMISSIONER OF LABOR,
Chief Factory Inspector.

COMMISSIONERS OF LABOR AND DEPUTIES

SINCE THE BUREAU WAS ESTABLISHED.

Names of commissioners.	Names of deputies.	Date of appointment.	By whom appointed.	Expiration of service.
John W. McGrath.....	John Devlin	June 19, 1883...	Gov. Begole....	Mar. 1, 1885.
C. V. R. Pond	Frank B. Egan.....	Feb. 18, 1885...	Gov. Alger.....	Mar. 1, 1887.
A. H. Heath.....	Charles E. Barnes.....	Feb. 28, 1887...	Gov. Luce.....	Mar. 1, 1891.
Henry A. Robinson	Milo E. Marsh.....	Feb. 8, 1891...	Gov. Winans...	Apr. 1, 1893.
Charles H. Morse.....	{ Jos. W. Selden, 1 year.. }	Apr. 13, 1893...	Gov. Rich	Apr. 30, 1897.
Jos. L. Cox.....	{ H. R. Dewey, 3 years.... }	May 1, 1897...	Gov. Pingree ..	Mar. 1, 1901.
Scott Griswold.....	John Holbrook.....	Mar. 1, 1901...	Gov. Bliss.....	.....
	Malcolm J. McLeod.....			

MICHIGAN'S PROSPEROUS CONDITION.

A BRIEF REVIEW.

The year closing the 19th century finds the commercial, industrial and labor conditions in Michigan most prosperous. Merchants report a large and increasing trade and on a sound financial basis. The commercial and savings deposits in the banks in all parts of the State are large and constantly increasing. But few manufactories are idle, and a majority of them are running nearly to their full capacity, and in certain lines are working day and night. Skilled and common labor find active employment at remunerative wages, the demand in many sections of the State being greater than the supply. From information gathered from the most reliable sources it can be truly said that the present time is the most prosperous season Michigan has ever experienced.

PENAL AND REFORMATORY INSTITUTIONS.

On pages 11-14 of this report will be found interesting statistics of the penal and reformatory institutions of the State. They are valuable data, as giving the number of inmates in each institution on the first day of May, 1900, their average age, whether native or foreign born, classification of crimes and offenses, and what they involve.

THE POPULATION FEATURE.

It is believed that this is the first State report published giving the population of the State and its minor subdivisions from the United States census taken in June, 1900. This item of itself will be found most useful for information and reference. The population of the State will be found on page 17; that of each county, the chartered cities, and the incorporated villages is given in the published statistics of each subdivision.

STATISTICS FROM THE 83 COUNTIES.

Statistics, given separately, from all the counties in the State, will be found on pages 17-29. The latest population of each county is given, together with statistics regarding county buildings, and of the inmates confined in the county jails on the first day of May, 1900. A

great deal of valuable information can be had from these statistics which is not published elsewhere.

CHARTERED CITIES.

There are 78 chartered cities in the State. The statistics of each city will be found on pages 33-59. The features of these statistics are the population of each city, the number and value of public buildings, permanent public improvements, labor and wages, fire departments, police statistics, and the inmates of the city prisons on the first day of May, 1900.

INCORPORATED VILLAGES.

The incorporated villages in the State number 305. On pages 63-138 will be found statistics of each, giving population, public buildings, improvements, indebtedness, cost of maintaining police force, general business, labor and wages, idle men, fire departments, police statistics, and inmates of village lockups on the first day of May, 1900.

PRISON STATISTICS.

On page 139 will be found a classified table, giving the number of inmates in the State penal and reformatory institutions, county jails, city prisons, and village lockups, on the first day of May, 1900, together with the crimes and offenses charged, the average age of the inmates, the number of each sex, the number of native and foreign born, and what the crimes involved. This table and the deductions on the following page are worthy the close study of those interested in criminal statistics.

REAL ESTATE STATISTICS.

That part of the report from pages 143-48 is devoted to statistics gathered from dealers in real estate. It contains much valuable information, the remarks from the several agencies being particularly interesting. This information was gathered from all sections of the State.

COMMERCIAL STATISTICS.

Statistics were gathered from dealers in five leading lines of trade, located in every section of the State. There were 525 firms interviewed, 105 each for dry goods, clothing, boots and shoes, groceries and hardware. Their reports and remarks are interesting, as showing the extent of the present commercial activity, and will be found on pages 151-60.

HOTEL KEEPERS.

There were 105 hotel keepers interviewed, all sections of the State being canvassed. Their reports and remarks will be found on pages

163-66. They are a good index of the present condition of business. No class of men are in closer touch with all classes of business men than the keepers of hotels.

AGRICULTURAL IMPLEMENTS.

This great industry in Michigan was thoroughly canvassed, a detailed record of which will be found on pages 169-73. The student of Michigan industries will gain much valuable data from this canvass, and manufacturers of all kinds will be interested in these statistics which were gathered by a careful, competent canvasser.

STOVES AND FURNACES.

Michigan takes pride in this, one of her greatest industries. The Commissioner of Labor felt justified in making a thorough canvass of its extent and importance, the data of which can be found on pages 177-81. The amount of capital invested, the output of manufactured products and value of the same, together with the wages paid, will be a surprise to many who are not conversant with the extent of the industry.

BITUMINOUS COAL.

Act No. 57, Session Laws of 1899, provides for the inspection of coal mines in Michigan, under the direction of the Commissioner of Labor. The annual report of the mine inspector, together with a resume of the industry, mines in operation, statistical table and deductions from the same will be found on pages 185-95. This chapter of the report is an important collection of statistics, most valuable for information and future comparison.

STATE LABOR CANVASS.

A canvass was made of nearly 5,000 male wage-earners, residing in all parts of the State, 34 localities being visited. The results of the canvass are shown by cities and villages and will be found on pages 199-215. The inquiries were as to wages, nativity, social condition, number of children, number to support, hours and months of labor, ownership of homes, price of rent and board, savings, nature of work, and average daily wages. The details of the canvass will be found interesting.

FEMALE WAGE-EARNERS.

Over 1,500 female wage-earners were canvassed, 22 localities being visited. The inquiries were nearly the same as those of the male workers. The results are recorded on pages 216-24. Its perusal will be interesting and valuable to those who have given the question of female labor a study. The classification of labor, and the wages paid will be useful for future comparison.

SUICIDES AND ATTEMPTED SUICIDES.

The record of suicides and attempted suicides in Michigan will be found on pages 227-39. This report is made up from newspaper clippings, giving manner used, causes assigned, and a personal data of these unfortunates. While this chapter is sad to contemplate, it affords study for those interested in discovering the causes for this increasing mania.

BOILER EXPLOSIONS.

A short chapter on the explosion of steam boilers, causes assigned for such explosions, number killed and injured, with local data will be found on pages 240-41. Attention is also called to the recommendations of some of the factory inspectors, who have given this important question careful thought and study.

There is a strong protest against the employment of incompetent men as engineers. This is a feature which enters the problem of accidents from boiler explosions, which must not be lost sight of by those engaged in framing "boiler inspection" laws; that is, the great liability of dangerous accidents from incompetent engineers and attendants, which requires legislation as much as the defective boiler.

That something should be done by our Michigan legislature to lessen the number and guard against the possibility of accidents from boiler explosions and the careless handling of boilers cannot be gainsaid, and none interested, or who have made an intelligent study of this subject, can object to State supervision of such devices as can be considered dangerous to the life and welfare of those compelled to labor, or live in close proximity to them.

The National Government recognized the importance of this subject relative to steam navigation, long ago, and, as we have said before, a large number of states have taken action in regard to the inspection of stationary steam boilers and have good laws to regulate their inspection and proper care.

STRIKES IN MICHIGAN.

There were no serious labor strikes reported in Michigan during the current year. Those reported, as far as obtained, will be found on pages 242-44. A brief synopsis of each strike with the location is given.

INDUSTRIAL STATISTICS.

Through the clipping department of the bureau brief records of some of Michigan's industries were gathered. They will be found on pages 243-51. The local data of these items make this feature of the report interesting, as they cover all portions of the State. These newspaper reports corroborate what has been said in the real estate and commercial statistics.

TECHNICAL PAPERS.

At the 14th annual convention of the international factory inspectors' association, held at Indianapolis, Ind., October 2-5, 1900, most valuable papers were read and discussed, among which were "The Shorter Work Day," by Hon. John Holbrook, Deputy Commissioner of Labor, of Lansing, Mich., "Child Labor in Wisconsin," by Hon. John J. Williams, Chief factory Inspector of Wisconsin, and "Low Water Alarms," by Hon. Frank C. Base, Deputy Factory Inspector of Cleveland, Ohio. These papers will be found in full on pages 255-64. They are interesting and valuable as giving useful data on these three important questions.

MICHIGAN TAKES FOREMOST RANK.

"Every home-loving citizen of Michigan, from the "prince of labor" to the man of millions, have just cause to feel proud of the foremost ranking of our State, when considering its industrial and commercial conditions and its many natural resources and advantages as compared with those of sister states, and foreign countries as well."

IMPROVEMENT IN THE CONDITION.

We believe that we are fully sustained in our claims and that our reports are backed up by facts and not fancies. While there is yet room for improvement, the condition of the toilers of our State is far better than for several years past. Capital has increased its investments many millions and manufacturers and business men speak more encouragingly. A spirit of hope is manifest among our agriculturalists, which has been substantially strengthened by a material increase in the price of all farm products, and their ability in many instances to meet their past due obligations.

CAN ONLY ACCOUNT FOR THE PRESENT.

The statistician can only account for the facts at the time of the canvass, and what the future years may do must remain hidden, though the prospects are indeed flattering, and all enter 1901 desirous that nothing shall clog the wheels that have been set in motion.

COURTESY OF STATE PRESS.

The bureau acknowledges the great assistance that it has had from the enterprising State press, which has aided us most substantially and in many ways when all other means failed. The people of the State and the laboring classes especially have just cause to feel most kindly toward the newspaper publishers of Michigan for the liberal and cheerful manner in which they have given gratuitous circulation to all important labor statistics and reports from the bureau and various departments of State in advance of the annual reports, which are so limited in number that they can but reach the very few.

THE APPENDIX.

A full and complete report of the work of factory inspection in Michigan for 1900 will be found back of the colored, half-title page in this report. It is entitled "Appendix" and is replete with labor and industrial statistical data, bearing directly on important phases of the labor question. Attention is called to the personal reports of the several deputy inspectors and to the recommendations made by them. They have been careful, observing and painstaking, and their observations are worthy of careful thought. The last chapter of the report contains the observations of Special Canvasser A. H. Smith, on what is termed "sweat shop" work and will be found interesting, it being the inauguration of this work in Michigan. This appendix will also be bound separate under the title of the "Eighth Annual Report of Factory Inspection," and can be obtained free of cost on application to the Commissioner of Labor, Lansing, Michigan.

SUMMARY OF THE WORK OF FACTORY INSPECTION, 1900.

The sub-division of the State into inspection districts was left the same as in 1899. The entire number of factories and workshops inspected during the current year was 5,491, it being 752 more than was inspected in 1899. The work has been prosecuted with vigor, the instructions to the inspectors being to make their inspections thorough and complete.

LOW WATER ALARMS.

The law requiring low water alarms to be placed on all stationary boilers devolved on this department to execute, entailing much extra care for the inspectors, who are required to be careful and painstaking in this important work. As a rule the law is being cheerfully complied with and it is expected that good results will follow its enforcement.

"SWEAT SHOP" INSPECTION.

A new section was added to the inspection law by the legislature of 1899, requiring an inspection of all so called "sweat shops." There is very little of this work in the State except in the city of Detroit, which constitutes the first inspection district. Early in the season Mr. A. H. Smith, a careful and competent man, living in Detroit, was appointed a special canvasser to investigate and report on this important phase of factory inspection. The law governing this inspection

and Mr. Smith's report will be found on pages 191-2. The prosecution of "sweat shop" inspection is yet in its inception and factory inspectors should use great care in making investigations.

STATISTICAL DATA.

The reports of the several deputy inspectors will be found replete with interesting and important statistical data. Lack of space precludes the publishing of only a part of the tabulated work, but the deductions taken from the tables are full and complete. Much of the labor and industrial statistics contained therein could not be obtained from any other source.

FIRST INSPECTION DISTRICT.

During the year 1,588 factories and workshops were inspected in this district, it being three more than were inspected in 1899. The district is comprised of the city of Detroit and contains more factories than any other district in the State. The inspector's report and a record of the work, including the accidents reported, will be found on pages 1-55.

SECOND INSPECTION DISTRICT.

This district embraces twenty counties across the south part of the State, containing several large manufacturing centers. The district covers an important territory, the duties of the inspector being very exacting. During the year 1,076 factories and workshops were inspected, a gain over 1899 of 251. The report of the deputy inspector and a record of the work will be found on pages 57-89.

THIRD INSPECTION DISTRICT.

Twelve counties in the northwest part of the lower peninsula form this district. It includes the city of Grand Rapids, which is the second largest manufacturing center in the State. The inspector's duties were arduous and exacting. His reports show 812 factories and workshops inspected, a gain over that of 1899 of 66. The inspector's report and a detailed report of the work will be found on pages 89-117.

FOURTH INSPECTION DISTRICT.

This district is very large, embracing twenty-three counties in the northeast part of the lower peninsula. It has several large manufacturing centers, the Bay Cities and Saginaw being the largest. The inspector's reports show 1,140 factories and workshops inspected during the year, a gain of 307 over 1899. The report of the deputy inspector and a detailed record of the work will be found on pages 119-54.

FIFTH INSPECTION DISTRICT.

This district covers more territory than any other district in the State, there being thirteen counties in the upper center of the lower peninsula, and the entire upper peninsula, twenty-nine counties in all. The inspector is subject to travel over a vast territory in the prosecution of his work. Many of the factories are immense lumbering plants, and there are no large manufacturing centers in the district, although it includes several cities of note in both the upper and lower peninsulas. During the year there were 875 factories and workshops inspected, a gain over 1899 of 125. The deputy inspector's report and a record of the work will be found on pages 155-84.

COMPLETE WORK OF 1900.

On pages 185-6 will be found a table containing a condensed and complete report of the entire work of inspection for 1900. This is a very interesting and comprehensive table and the deductions from the same are replete with useful information. The statistical data from this table is invaluable to those who are studying the labor and industrial questions.

COMPARISON OF ACCIDENTS.

From year to year since factory inspection has been established in Michigan accidents have gradually decreased. This is one of the pleasant features of the work, the results more than repaying all the expense incurred. A comparison of the accidents reported in 1900 with the previous year will be found on pages 187-8.

INTERESTING STATISTICS

FROM

PENAL AND REFORMATORY INSTITUTIONS

REPORTS FROM

Michigan State Prison	-	-	-	-	-	-	-	-	Jackson
State House of Correction and Reformatory	-	-	-	-	-	-	-	-	Ionia
State House of Correction and Branch Prison	-	-	-	-	-	-	-	-	Marquette
Detroit House of Correction	-	-	-	-	-	-	-	-	Detroit
Industrial School for Boys	-	-	-	-	-	-	-	-	Lansing
Industrial Home for Girls	-	-	-	-	-	-	-	-	Adrian

STATISTICS OF STATE PENAL AND REFORMATORY INSTITUTIONS.

MICHIGAN STATE PRISON.

The Michigan State Prison is located at the city of Jackson. On the first day of May, 1900, there were confined 766 convicts, all of whom were males; 596 native born and 170 foreign born; average age, 35 years; crimes involving life, 192; involving virtue, 109; involving property, 432; involving morality, 33. The crimes were classified as follows: Murder and manslaughter, 117; assaults of all kinds, 79; burglary, 147; robbery, 43; false pretense, 2; forgery, 38; larceny, 142; breaking and entering buildings, 42; resisting an officer, 2; receiving stolen property, 12; perjury, 10; embezzlement, 4; arson, 8; incest, 7; adultery, 1; bigamy, 8; keeping house of ill-fame, 4; malicious destruction of property, 1; rape, 68; assault on female children, 21; counterfeiting, 1; offenses against railroads, 4; other offenses, 5. Total, 766.

STATE HOUSE OF CORRECTION AND REFORMATORY.

The State House of Correction and Reformatory is located at the city of Ionia. On the first day of May, 1900, there were confined 408 convicts, all of whom were males; 341 native born and 67 foreign born; average age, 29 years; crimes involving life, 11; involving virtue, 31; involving property, 307; involving good government, 35; involving morality, 24. The crimes were classified as follows: Murder and manslaughter, 4; assaults of all kinds, 29; burglary, 91; robbery, 12; false pretense, 7; forgery, 21; larceny, 145; breaking and entering buildings, 26; resisting an officer, 6; receiving stolen property, 1; perjury, 2; embezzlement, 4; arson, 5; adultery, 3; bigamy, 3; keeping house of ill-fame, 2; malicious destruction of property, 1; rape, 17; assaults on female children, 12; offenses against railroads, 3; habitual drunkards, 6; other offenses, 8. Total, 408.

STATE HOUSE OF CORRECTION AND BRANCH PRISON.

The State House of Correction and Branch Prison is located at the city of Marquette. On the first day of May, 1900, there were confined 203 convicts, all of whom were males; 126 native born and 77 foreign born; average age, 34 years; crimes involving life, 44; involving virtue, 34; involving property, 109; involving good government, 11; involving morality, 5. The crimes were classified as follows: Murder and manslaughter, 19; assaults of all kinds, 38; burglary, 30; robbery, 20; false pretense, 1; forgery, 11; larceny, 35; breaking and entering buildings, 7; resisting an officer, 1; perjury, 1; arson, 5; adultery, 1; bigamy, 1;

rape, 19; assaults on female children, 3; disorderly, 6; other offenses, 5. Total, 203.

DETROIT HOUSE OF CORRECTION.

The Detroit House of Correction is located at the city of Detroit. It is not, strictly speaking, a State institution, being controlled and operated by the city of Detroit. But statutory provisions are made by which any county in the State may commit prisoners to the institution. No other State penal institution admits female convicts. On the first day of May, 1900, there were confined 423 convicts, of whom, 368 were males and 55 were females; 347 native born and 76 foreign born; average age, 31 years; crimes involving life, 24; involving virtue, 25; involving property, 217; involving good government, 89; involving morality, 68. The crimes were classified as follows: Murder and manslaughter, 24; assaults of all kinds, 21; burglary, 13; robbery, 9; false pretense, 7; forgery, 3; larceny, 146; breaking and entering buildings, 9; receiving stolen property, 2; perjury, 2; embezzlement, 7; arson, 2; incest, 2; adultery, 4; keeping house of ill-fame, 5; malicious destruction of property, 4; rape, 2; assaults on female children, 2; counterfeiting, 23; offenses against railroads, 2; habitual drunkards, 4; disturbing the peace, 100; prostitution, 6; offenses against United States laws, 21; other offenses, 3. Total, 423.

INDUSTRIAL SCHOOL FOR BOYS.

The Industrial School for Boys is located at the city of Lansing. On the first day of May, 1900, there were 630 inmates, all of whom were males; 470 native born and 160 foreign born; average age, 14 years; offenses involving property, 248; involving good government, 332; involving morality, 50. The offenses are classified as follows: Burglary, 8; larceny, 220; malicious destruction of property, 10; offenses against railroads, 12; disorderly, 30; trespass, 10; assault and battery, 6; vagrancy, 14; truancy, 318; other offenses, 2. Total, 630.

INDUSTRIAL HOME FOR GIRLS.

The Industrial Home for Girls is located at the city of Adrian. On the first day of May, 1900, there were 305 inmates, all of whom were females; 209 native born and 96 foreign born; average age, 16 years; offenses involving virtue, 155; involving property, 57; involving good government, 75; involving morality, 18. The offenses are classified as follows: False pretense, 1; forgery, 1; larceny, 53; arson, 2; disorderly, 152; prostitution, 11; assault and battery, 2; truancy, 56; ungovernable and incorrigible, 18; other offenses, 9. Total, 305.

DEDUCTIONS FROM THE FOREGOING STATISTICS OF STATE PENAL AND REFORMATORY INSTITUTIONS.

Number of penal and reformatory institutions in the State.....	6
Number known as penal.....	4
Number known as reformatory.....	2
Number of inmates on the first day of May, 1900.....	2,735
Number in the penal institutions.....	1,800
Number in the reformatory institutions.....	935

Number that were males.....	2,375
Number that were females.....	360
Number that were native born.....	2,056
Number that were foreign born.....	679
Number where crime involved life.....	271
Number where crime involved virtue.....	354
Number where crime involved property.....	1,370
Number where crime involved good government.....	542
Number where crime involved morality.....	198

Average age of convicts in penal institutions, 32.2 years.

Average age of inmates in reformatory institutions, 15 years.

The crimes and offenses the inmates of these institutions were charged with were as follows: Murder and manslaughter, 164; assaults of all kinds, 167; burglary, 289; robbery, 84; false pretenses, 18; forgery, 74; larceny, 741; breaking and entering buildings, 84; resisting an officer, 9; receiving stolen property, 15; perjury, 15; embezzlement, 15; arson, 22; incest, 9; adultery, 9; bigamy, 12; keeping house of ill-fame, 11; malicious destruction of property, 16; rape, 106; assaults on female children, 38; counterfeiting, 24; offenses against railroads, 21; habitual drunkards, 10; disorderly, 188; disturbing the peace, 100; prostitution, 17; offenses against United States laws, 21; trespass, 10; assault and battery, 8; vagrancy, 14; truancy, 374; ungovernable and incorrigible, 18; other offenses, 32. Total, 2,735.

ORGANIZED COUNTIES
COUNTY BUILDINGS AND VALUE OF SAME
CRIMINAL STATISTICS
REPORTS FROM SHERIFFS MAY 1, 1900

STATISTICS OF ORGANIZED COUNTIES.

Population of State in 1900, 2,420,982.

ALCONA—Population, 5,691; has a court house, built of wood, value \$12,000; has jail built of brick, estimated value \$10,000; has county poor house and farm, value \$3,500. Had no prisoners in county jail on the first day of May, 1900. William Edwards, sheriff.

ALGER—Population, 5,860; has a court house, built of wood, value \$12,000; has jail built of stone, estimated value \$23,000; has no other county buildings. Expended \$150 on public buildings in 1900. On the first day of May, 1900, had three prisoners in jail, all males; one native and two foreign born; one charged with being disorderly and two with larceny. Ole L. Peterson, sheriff.

ALLEGAN—Population, 38,812; has a court house, built of brick and stone, value \$50,000; has jail built of brick, value not given; also has office building built of brick, value \$1,000. On the first day of May, 1900, had eight prisoners confined in jail; all males; six native and two foreign born; three charged with being tramps, one with larceny, two with burglary, one with non-support, and one with false pretense. John Whitbeck, sheriff.

ALPENA—Population, 18,254; has a brick court house, value \$15,000; has jail built of stone, estimated value \$12,000; has county poor house and farm, value \$10,000. On the first day of May, 1900, had five prisoners in jail; all males; all foreign born; three charged with rape, one with forgery, and one with embezzlement. James E. Denton, sheriff.

ANTRIM—Population, 16,568; has no court house; has jail built of wood, estimated value \$2,000; has sheriff's residence, value \$1,200; also poor house and farm, value \$4,000. On the first day of May, 1900, had three prisoners in jail; all males; all native born; two charged with being tramps, one with being disorderly. Samuel Crampton, sheriff.

ARENAC—Population, 9,821; has a court house, built of brick, and jail attached to court house; estimated valuation of the building \$10,000; has no other county buildings. On the first day of May, 1900, had one prisoner in jail; male; foreign born; charged with larceny. George Robinson, sheriff.

BARAGA—Population, 4,320; has a court house, built of brick and stone, value \$15,000; has a jail built of brick and stone, estimated value \$10,000; has no other county buildings. On the first day of May, 1900, had three prisoners in jail; all males; two native born, one foreign born; two charged with being disorderly, one with assault and battery. Henry Girard, sheriff.

BARRY—Population, 22,514; has a court house, built of stone and brick, value \$47,000; has jail built of stone and brick, estimated value \$10,000; has poor house and county farm, value \$6,000; has hospital, value \$3,000. On the first day of May, 1900, had one prisoner in county jail; male; foreign born; charged with being disorderly. Samuel C. Ritchie, sheriff.

BAY—Population, 62,378; has court house built of brick, value \$25,000; has brick jail, estimated value \$20,000; has poor house and farm, value \$10,000; in 1900 expended \$100 for public buildings. On the first day of May, 1900, had twenty-nine prisoners in county jail; 27 males and two females; 20 native born, nine foreign born; three charged with being tramps, three with being disorderly, seven with larceny, two with burglary, one with murder, six with being drunk, one with malicious injury to property, one with using obscene language, one with non-support, two insane, one false pretense, and one with impersonating an officer. Henry Guntermann, sheriff.

BENZIE—Population, 9,685; has a court house, built of wood, value \$1,200; has jail built of wood, estimated value \$1,800; has no other county buildings. On the first day of May, 1900, had four prisoners in jail; all native born; three males, one female; three charged with burglary and one with larceny. Benjamin Little, sheriff.

BERRIEN—Population, 49,165; has a stone court house, value \$70,000; has jail built of brick, estimated value \$15,000; has poor house and farm, value not given. On the first day of May, 1900, seven prisoners were confined in jail; six males, one female; five native born, two foreign born; one charged with being disorderly, two with larceny, one with forgery, two with carrying concealed weapons, and one with non-support. Edgar H. Ferguson, sheriff.

BRANCH—Population, 27,811; has court house, built of brick and stone, value \$40,000; has jail built of brick and stone, estimated value \$10,000; has poor house and farm, value \$10,000; in 1900 expended \$3,000 for public buildings. On the first day of May, 1900, had five prisoners in jail; four males, one female; four native born, one foreign born; one charged with larceny, one with jumping board bill, and three with lascivious cohabitation. William W. Herendeen, sheriff.

CALHOUN—Population, 49,315; has court house, built of brick, value \$50,000; has brick jail, estimated value \$18,000; has poor house, value \$15,000. On the first day of May, 1900, had 22 prisoners in jail; 21 males, one female; 19 native born, three foreign born; three charged

with being disorderly, one with assault and battery, five with larceny, three with burglary, two forgery, one abandoning child, one bastardy, four drunk, one vagrancy, and one disturbing a religious meeting. Herbert R. Williams, sheriff.

CASS—Population, 20,876; has court house, built of stone, value \$40,000; has brick jail, estimated value \$15,000; also office building, value \$2,000. On the first day of May, 1900, had six prisoners in jail; all males and all native born; one charged with being disorderly, one with assault and battery, one with larceny, and three with violating the game and fish laws. William Reagan, sheriff.

CHARLEVOIX—Population, 13,956; has a court house built of brick (veneered), value \$7,000; the jail is constructed within the court house; in 1900 expended \$200 for public buildings. On the first day of May, 1900, had three prisoners in jail; all males; two native and one foreign born; two charged with larceny and one with burglary. Henry C. Cooper, sheriff.

CHEBOYGAN—Population, 15,516; has a court house built of brick, value \$40,000; has brick jail, estimated value \$15,000; has county poor house, value \$3,000. On the first day of May, 1900, had six prisoners in jail; all males; five native and one foreign born; one charged with murder, and five with other offenses. Frederick R. Wing, sheriff.

CHIPPEWA—Population, 21,338; has a court house built of stone, value \$25,000; has stone jail, estimated value \$15,000; has small jail buildings in Detour and Bay Mills, built of wood with steel cages. On the first day of May, 1900, had 12 prisoners in jail; all males; one native and 11 foreign born; seven charged with being disorderly, three with assault and battery, one with larceny and one with murder. Edgar J. Swart, sheriff.

CLARE—Population, 8,360; has court house built of wood, value \$6,000; has no other county buildings; in 1900 expended \$200 on public buildings. Had no prisoners in county jail on the first day of May, 1900. John R. Brown, sheriff.

CLINTON—Population, 25,136; has a court house built of brick, value \$40,000; has jail built of brick, estimated value \$12,000. On the first day of May, 1900, had nine prisoners in jail; eight males and one female; eight native and one foreign born; one charged with being disorderly, one with larceny, one with assault with intent to kill, three with adultery, one with bigamy, one with lewd and lascivious cohabitation and one civil prisoner. Alonzo E. Dunn, sheriff.

CRAWFORD—Population, 2,943; has a court house built of wood, value \$15,000; has jail, estimated value \$1,000; also has county poor house and farm, value \$1,000. Had no prisoners in county jail on the first day of May, 1900. George F. Owen, sheriff.

DELTA—Population, 23,881; has a court house built of brick, value \$30,000; has jail built of brick, with an annex of wood, estimated value \$5,000; also has county hospital and poor house; value of hospital, \$17,000; poor house, \$3,000. On the first day of May, 1900, had three prisoners in jail; all males; all native born; all charged with being disorderly. Frederick M. Olmstead, sheriff.

DICKINSON—Population, 17,890; has a court house built of brick and stone, value \$36,000; has jail built of brick and stone, estimated value \$4,000. On the first day of May, 1900, had five prisoners in jail; all males; two native and three foreign born; two charged with being disorderly and three with other offenses. Charles Anderson, sheriff.

EATON—Population, 31,668; has a court house built of brick and stone, value \$50,000; has brick jail, estimated value \$10,000; has poor house and farm, value \$10,000; in 1900 expended \$2,000 on public buildings. On the first day of May, 1900, had two prisoners in jail; both males; both native born; one charged with being disorderly and one with defrauding a hotel keeper. Fred L. Shepherd, sheriff.

EMMET—Population, 15,931; has a court house built of wood, value, \$6,000; has jail, built of wood, estimated value \$1,000. On the first day of May, 1900, had two prisoners in jail; both males; both native born; one charged with forgery and one with rape. David R. Jones, sheriff.

GENESEE—Population, 41,804; has a court house built of brick, value \$10,000; has brick jail, estimated value \$5,000; has poor house and farm, value not given; in 1900 expended \$2,500 on public buildings. On the first day of May, 1900, had six prisoners in jail; all males; four native and two foreign born; two charged with being disorderly, one with larceny, one with embezzlement, one with bastardy, and one with attempting to break into a dwelling house in the day time. Arthur C. McCall, sheriff.

GLADWIN—Population, 6,564; has a court house built of brick and stone, value \$20,000; jail is in basement of court house. Had no prisoners in county jail on the first day of May, 1900. Herbert Shell, sheriff.

GOGEBIC—Population, 16,738; has a court house built of stone, value \$60,000; has stone jail, estimated value \$20,000; in 1900 expended \$500 for public buildings. On the first day of May, 1900, had two prisoners in jail; both males; both foreign born; both charged with being disorderly. Andrew Byrne, sheriff.

GRAND TRAVERSE—Population, 20,479; has a court house, built of brick, value \$35,000; has brick jail, estimated value \$10,000; has poor house and farm, value \$1,000. On the first day of May, 1900, had one prisoner in jail; male; native born; charged with jumping on a moving train. Oscar Simpson, sheriff.

GRATIOT—Population, 29,889; has a court house built of wood, value \$6,000; has jail built of brick and stone, estimated value \$15,000; has poor house and farm, value \$4,000; in 1900 is expending \$42,000 for public buildings. Had nine prisoners in jail on the first day of May, 1900; all males; all native born; one charged with larceny, one with forgery, two with murder, one insane, two with perjury, one with rape, and one with adultery. Nelson J. McCullough, sheriff.

HILLSDALE—Population, 29,865; has a court house built of stone, value \$45,000; has jail built of brick and stone, estimated value \$20,000; has poor house and farm, value not given. On the first day of May, 1900, had four prisoners in jail; all males; all native born; two charged with larceny, one with forgery and one with rape. James O'Melay, sheriff.

HOUGHTON—Population, 66,063; has a court house built of brick and stone, value \$100,000; the jail is constructed within the court house; has poor house and farm, value \$35,000. On the first day of May, 1900, had 17 prisoners in jail; all males; 10 native and seven foreign born; two charged with being tramps, 10 with being disorderly, one with assault and battery, one with larceny, one with bastardy and two with assault with intent to do great bodily harm. Charles F. Lean, sheriff.

HURON—Population, 34,162; has a court house built of brick and stone, value \$40,000; has jail built of brick and stone, estimated value \$12,000; one other building, value \$600. On the first day of May, 1900, had one prisoner in county jail, male; native born; charged with bastardy. James Rowe, sheriff.

INGHAM—Population, 39,818; has a court house built of brick, value \$10,000; has jail built of brick, estimated value \$6,000. On the first day of May, 1900, had twelve prisoners in jail; eleven males, one female; all native born; two charged with being tramps, two with being disorderly, two with assault and battery, one with burglary, two with forgery, one with keeping house of ill-fame, one with contempt of court and one drunk. William H. Porter, sheriff.

IONIA—Population, 34,329; has a court house built of stone, value \$75,000; has brick jail, estimated value \$10,000; has poor house and farm, value \$15,000. On the first day of May, 1900, had nine prisoners in jail; all males, seven native and two foreign born; two charged with being tramps, two with horse stealing, one assault with intent to kill, one with rape and three drunk. Frank L. Moon, sheriff.

IOSCO—Population, 10,246; has a court house built of wood, value \$10,000; has brick jail, estimated value \$4,000; has poor house and farm, value \$8,000; in 1900 expended \$200 on public buildings. On the first day of May, 1900, had one prisoner in jail; male; foreign born; charged with defrauding hotel keeper. Peter E. Shien, sheriff.

IRON—Population, 8,990; has a court house built of brick and stone, value \$50,000; has jail built of brick and stone, estimated value \$10,000; has poor house and farm, value \$2,000; has pest house and sheds, value \$2,000. On the first day of May, 1900, had three prisoners in jail; all males; all foreign born; two charged with indecent exposure and one insane. Manville B. Waite, sheriff.

ISABELLA—Population, 22,784; has a court house built of brick, value \$35,000; has a brick jail, estimated value \$10,000; has poor house and farm, value \$5,000; in 1900 expended \$500 on public buildings. Had no prisoners in county jail on the first day of May, 1900. Franklin W. Ellis, sheriff.

JACKSON—Population, 48,222; has a court house built of brick, value \$25,000; has jail built of stone and brick, estimated value \$25,000. On the first day of May, 1900, had fifteen prisoners in jail; thirteen males, two females; twelve native and three foreign born; nine charged with being disorderly, four with larceny, one with burglary, and one with embezzlement. Porter S. Harrington, sheriff.

KALAMAZOO—Population, 44,310; has a court house built of brick, value \$40,000; has a brick jail, estimated value \$10,000; has other county buildings, value not given. On the first day of May, 1900, had thirty prisoners in jail; all males; twenty-seven native and three foreign born; twenty charged with being disorderly, one with assault and battery, seven with larceny, one with forgery and one with assault with intent to kill. Wilber B. Snow, sheriff.

KALKASKA—Population, 7,133; has a court house built of brick, value, \$3,600; has jail built of wood, estimated value \$1,000. On the first day of May, 1900, had five prisoners in jail; all males; four native and one foreign born; three charged with being disorderly, two with larceny. Ellsworth C. Chesshir, sheriff.

KENT—Population, 129,714; has a court house built of brick and stone, value \$300,000; has a brick jail, estimated value \$30,000; has a county home for the poor, value \$45,000. On the first day of May, 1900, had 51 prisoners in jail; 48 males and three females; 33 native and 18 foreign born; two charged with being tramps, 28 with being disorderly, one with assault and battery, eight with larceny, one with forgery, one with embezzlement, two with non-support, one with adultery, one with bigamy, one with bastardy, one with rape, one with truancy, one with violation of election laws, and two with other offenses. Irving Woodworth, sheriff.

KEWEENAW—Population, 3,217; has a court house built of wood, value \$3,500; has stone jail, estimated value \$4,500. On the first day of May, 1900, had one prisoner in jail, male; foreign born; insane. John Dodge, sheriff.

LAKE—Population, 4,957; has a court house built of brick and stone,

value \$12,000; has jail built of brick and stone, estimated value \$4,000. Had no prisoners in county jail on the first day of May, 1900. Mark V. Harding, sheriff; David Colton, under sheriff.

LAPEER—Population, 27,641; has court house built of wood, value \$10,000; has brick jail, estimated value \$5,000; has office building, value \$3,000; poor house and farm, value \$12,000. On the first day of May, 1900, had five prisoners in jail; all males; all native born; one charged with being disorderly, two with larceny and two with forgery. William E. Myers, sheriff.

LEELANAU—Population, 10,556; has court house built of wood, value \$2,000; has jail built of wood; estimated value \$200. Had no prisoners in county jail on the first day of May, 1900. Adam E. Bellingier, sheriff; Wm. Brown, under sheriff.

LENAWEE—Population, 48,406; has a court house built of brick, value \$75,000; has brick jail, estimated value \$10,000; has a poor house and farm, value \$12,000. On the first day of May, 1900, had six prisoners in jail; all males; four native and two foreign born; one charged with being a tramp, two with being disorderly, one with indecent exposure, one with rape and one with false pretense. John C. Iffland, sheriff.

LIVINGSTON—Population, 19,664; has a court house built of brick, value \$40,000; has a brick jail, estimated value \$8,000. Had no prisoners confined in county jail on the first day of May, 1900. Malachy Roche, sheriff.

LUCE—Population, 2,983; has a court house built of brick, value \$6,000; has a stone jail, estimated value \$10,000; has poor house and farm, value \$1,500. On the first day of May, 1900, had one prisoner in county jail; male; native born; charged with resisting an officer. William T. Crocker, sheriff.

MACKINAC—Population, 7,703; has a court house built of stone and brick, value \$15,000; jail is in basement of court house. Had no prisoners in county jail on the first day of May, 1900. Bruno Leclerc, sheriff.

MACOMB—Population, 33,244; has a court house built of brick and stone, value \$50,000; has jail, built of brick and stone, value \$25,000; has poor house and farm, value \$20,000. On the first day of May, 1900, had four prisoners in jail; all males; all foreign born; three charged with being disorderly and one with larceny. Louis T. Cady, sheriff.

MANISTEE—Population, 27,856; has a court house built of brick and stone, value \$50,000; jail is in basement of court house; has poor house and farm, value \$20,000. On the first day of May, 1900, had six prisoners in jail; four males; two females; four native and two foreign born; four charged with being disorderly, one with rape and one insane. William Lloyd, sheriff.

MARQUETTE—Population, 41,239; has a court house built of wood, value \$10,000; has stone jail, value not given; has poor house and farm, value, \$5,000; in 1900 expended \$15,000 on public buildings. On the first day of May, 1900, had twenty prisoners in jail; nineteen males and one female; five native and fifteen foreign born; three charged with being tramps, seven with being disorderly, four with assault and battery, two with larceny, one with burglary, two with murder and one offense not named. John Carlson, sheriff.

MASON—Population, 18,885; has a court house built of brick, value \$5,000; has brick jail, estimated value \$10,000. Had no prisoners confined in county jail on the first day of May, 1900. Henry C. Cole, sheriff.

MECOSTA—Population, 20,693; has court house built of brick, value \$35,000; has jail built of brick and stone, estimated value \$17,000; has poor house and farm, value \$8,000. On the first day of May, 1900, had two prisoners in jail; both males; both native born; one charged with bastardy and one insane. Bert D. Moody, sheriff.

MENOMINEE—Population, 27,046; has a court house built of brick and stone, value \$40,000; has jail built of brick and stone, estimated value \$15,000; has poor house and farm; value \$8,000. On the first day of May, 1900, had six prisoners in jail; all males; all native born; all charged with being disorderly. Julius Ruprecht, sheriff.

MIDLAND—Population, 14,439; has a court house built of wood, value \$5,000; has brick jail, estimated value \$4,000; has county poor house and barns, value \$3,000; in 1900 expended \$300 on public buildings. On the first day of May, 1900, had one prisoner in jail; male; native born; charged with assault and battery. John Madill, sheriff.

MISSAUKEE—Population, 9,308; has a court house built of wood, value \$8,000; has a brick jail, estimated value \$4,000; has poor house and barns, value \$5,600; in 1900 expended \$1,000 on public buildings. On the first day of May, 1900, had one prisoner in jail; male; foreign born; charged with being disorderly. Simon H. Lucas, sheriff.

MONROE—Population, 32,754; has a court house built of stone, value \$25,000; has a brick jail, estimated value \$14,000; has a poor house and farm, value \$30,000. On the first day of May, 1900, had four prisoners in jail; all males; all native born; one charged with being disorderly, one with burglary, one with indecent exposure and one with malicious destruction of property. John Rod, sheriff; H. J. Rod, under sheriff.

MONTCALM—Population, 32,754; has a court house built of brick and stone, value \$20,000; has jail built of brick and stone, estimated value not given. On the first day of May, 1900, had three prisoners in jail; all males; two native and one foreign born; one charged with being a tramp, one with being disorderly and one with assault and battery. James K. Train, sheriff.

MONTMORENCY—Population, 3,234; has a court house built of wood, value \$6,000; jail is in basement of court house, estimated value \$2,000; has poor house and farm buildings, value \$2,500. Had no prisoners in the county jail on the first day of May, 1900. Joshua Wiggins, sheriff.

MUSKEGON—Population, 37,036; has a court house built of stone, value \$125,000; has jail built of stone and brick, estimated value \$30,000; has a poor house and farm, value \$3,000. On the first day of May, 1900, had eight prisoners in jail; all males; all native born; four charged with being tramps, three with being drunk and disorderly and one on execution for debt. Gustav Neumeister, sheriff.

NEWAYGO—Population, 17,673; has a court house built of brick, value \$4,000; has jail built of wood, value not given; has poor house and farm, value \$5,000. On the first day of May, 1900, had six prisoners in jail, all males; four native and two foreign born; one charged with assault and battery, one with larceny, three insane and one civil prisoner. John A. Bullis, sheriff.

OAKLAND—Population, 44,792; has a court house built of brick and stone, value \$20,000; has jail built of brick and stone, estimated value \$30,000; has poor house and farm, value \$8,000. On the first day of May, 1900, had eight prisoners in jail; seven males; one female; six native and two foreign born; one charged with being disorderly, one with assault and battery, two with larceny, two with burglary, one with embezzlement and one with bastardy. Richard D. Belt, sheriff.

OCEANA—Population, 16,644; has a court house built of wood, value \$10,000; has jail built of wood, estimated value \$1,000; has poor house, hospital and farm, value \$10,000. Had no prisoners in county jail on the first day of May, 1900. James J. McVean, sheriff.

OGEMAW—Population, 7,765; has a brick court house, value \$15,000; has a brick jail, estimated value \$5,000; has other public buildings, value not given; in 1900 expended \$200 on public buildings. Had no prisoners in county jail on the first day of May, 1900. Clarence J. Phelps, sheriff.

ONTONAGON—Population, 6,197; has a court house built of brick and stone, value \$20,000; has jail built of brick and stone, estimated value \$5,000; has poor house and farm, value \$2,000. On the first day of May, 1900, had two prisoners in jail; both males; one native and one foreign born; one charged with being disorderly and one with adultery. Charles H. O'Rourke, sheriff.

OSCEOLA—Population, 17,859; has a court house built of wood, value \$5,000; has jail, estimated value \$2,000. Had no prisoners in county jail on the first day of May, 1900. Frank McIntyre, sheriff.

OSCODA—Population, 1,468; has a court house built of wood, value \$3,000; has jail built of wood, estimated value \$1,000; has sheriff's residence, value \$2,000; in 1900 expended \$150 on public buildings. Had no

prisoners in county jail on the first day of May, 1900. George Richardson, sheriff.

OTSEGO—Population, 6,175; has a court house built of brick and stone, value \$30,000; jail within court house; has poor house, value \$3,000. Had no prisoners in county jail on the first day of May, 1900. Dexter K. Mitchell, sheriff.

OTTAWA—Population, 39,667; has a court house built of brick and stone, value \$65,000; has jail built of brick and stone, estimated value \$15,000. On the first day of May, 1900, had four prisoners in jail; all males; three native and one foreign born; two charged with being drunk, one with malicious destruction of property and one with violating the liquor law. Frank Van Ry, sheriff.

PRESQUE ISLE—Population, 8,821; has a court house built of wood and stone, value \$10,000; has a stone jail, estimated value \$1,000; in 1900 expended \$350 on public buildings. Had no prisoners in county jail on the first day of May, 1900. Richard Noffze, sheriff.

ROSCOMMON—Population, 1,787; has a court house built of wood, value \$3,000; has jail built of wood, estimated value \$1,000. Had no prisoners in county jail on the first day of May, 1900. Alexander H. Johnston, sheriff.

SAGINAW—Population, 81,222; has a court house built of brick, stone and iron, value \$130,000; has jail built of brick and stone, estimated value \$30,000; has poor house and farm, value \$60,000. On the first day of May, 1900, had six prisoners in jail; five males and one female; all native born; three charged with being disorderly, one with larceny and two insane. Henry A. Newton, sheriff.

SANILAC—Population, 35,055; has a court house built of brick, value \$75,000; has jail built of brick and stone, value \$50,000; has poor house, value \$2,000; in 1900 expended \$100 on public buildings. On the first day of May, 1900, had four prisoners in jail; all males; three native and one foreign born; one charged with being disorderly, one with larceny, one with bastardy and one with attempted rape. Maitland M. Stone, sheriff.

SCHOOLCRAFT—Population, 7,889; has a court house built of wood, value \$3,000; has jail built of wood, estimated value \$4,000; has other public buildings, value \$500. On the first day of May, 1900, had six prisoners in jail; all males; three native and three foreign born; five charged with being disorderly and one with bastardy. Andrew Ekstrom, sheriff.

SHIAWASSEE—Population, 33,866; has a court house built of brick, value \$8,000; has a brick jail, estimated value \$12,000; has office building, value \$3,000; has poor house and farm, value \$25,000. On the first day of May, 1900, had five prisoners in jail; all males; four native and one

foreign born; one charged with being a tramp, one with being disorderly, two with larceny and one with slander. Monroe L. Scougale, sheriff.

ST. CLAIR—Population, 55,228; has a court house built of brick, value \$75,000; has jail built of brick and stone, estimated value \$40,000; has an office building, value \$5,000; in 1900 expended \$500 on public buildings. On the first day of May, 1900, had twenty-six prisoners in jail; twenty-three males, three females; twelve native born; fourteen foreign born; sixteen charged with being disorderly, three with larceny, two with burglary, three with forgery, one with false pretense and one with rape. Harrison W. Maines, sheriff.

ST. JOSEPH—Population, 23,889; has a court house built of brick and stone, value \$38,000; has jail built of brick, estimated value \$2,000; has poor house and farm, value \$3,000. On the first day of May, 1900, had eleven prisoners in jail; all males; ten native and one foreign born; three charged with being tramps, one with being disorderly, three with larceny, one with murder, one with rape and two with riding unlawfully on freight train. Fred J. Avery, sheriff.

TUSCOLA—Population, 35,890; has a court house built of brick and stone, value \$20,000; has jail built of brick and stone, value not given; has poor house and farm, value \$11,000. In 1900 expended \$1,000 on public buildings. On the first day of May, 1900, had ten prisoners in jail; nine males; one female; seven native and three foreign born; one charged with being disorderly, two with assault and battery, one with larceny, one with embezzlement, two with arson, two insane and one drunk. Charles O. Blinn, sheriff.

VAN BUREN—Population, 33,274; has a court house built of wood, value \$2,000; has jail built of wood, estimated value \$1,000; has office building, value \$1,500; in 1900 expended \$100 on public buildings. On the first day of May, 1900, had seven prisoners in jail; six males and one female; all native born; three charged with being disorderly, one with assault and battery, two with larceny and one with adultery. Wesley J. Thomas, sheriff.

WASHTENAW—Population, 47,761; has a court house built of brick and stone, value \$50,000; has a brick jail, estimated value \$12,000; has poor house and farm, value \$20,000; in 1900 expended \$1,000 on public buildings. On the first day of May, 1900, had 22 prisoners in jail; 21 males, one female; 18 native and four foreign born; six charged with being disorderly, three with larceny, one with burglary, two with assault with intent to kill, one with truancy, one with highway robbery, one with assault with intent to rob and one with crime against nature, and six tramps. John Gillen, sheriff.

WAYNE—Population, 348,793; has a court house built of stone, value \$2,000,000; has a stone jail, estimated value \$87,000; has county poor house and asylum, value \$500,000; in 1900 expended \$1,000,000 on public buildings. On the first day of May, 1900, had 60 prisoners in jail; 55

males, five females; 40 native and 20 foreign born; 17 charged with being disorderly, 17 with larceny, one with burglary, two with forgery, one with murder, five drunk, one contempt of court, one conspiracy, one defrauding a hotel, two perjury, five rape, one with assault with intent to kill, one with indecent exposure of person, and five with malicious destruction of property. G. Duffield Stewart, sheriff.

WEXFORD—Population, 16,845; has no court house; has county jail, built of brick and stone, estimated value \$3,000; in 1900 expended \$300 on public buildings. On the first day of May, 1900, had two prisoners in county jail; both males; one native and one foreign born; one charged with being disorderly and one with rape. George A. Troy, sheriff.

DEDUCTIONS FROM THE FOREGOING STATISTICS OF COUNTIES.

Whole number of counties in the State.....	83
Number having court houses.....	81
Number having no court houses.....	2
Aggregate value of court houses.....	\$4,699,300 00
Average value of each.....	58,016 00
Number that are built of brick.....	24
Number that are built of brick and stone.....	26
Number that are built of stone.....	9
Number that are built of wood.....	22
Number counties having no court house.....	2
Number counties having county jails.....	83
Number giving value of county jails.....	72
Number not giving value of county jails.....	4
Number where county jail is built in the court house.....	7
Aggregate value of county jails.....	\$868,560 00
Average value for each county.....	12,063 33
Number that are built of brick.....	30
Number that are built of brick and stone.....	29
Number that are built of stone.....	10
Number that are built of wood.....	14
Number counties having other public buildings.....	56
Number having no other public buildings.....	27
Number giving value of other public buildings.....	51
Aggregate value as given.....	\$1,019,300 00
Average value for each county.....	19,986 27
Number expending money on public buildings in 1900.....	24
Number expending no money on public buildings in 1900.....	59
Aggregate amount expended, including Wayne county.....	\$1,071,350 00
Amount expended in Wayne county.....	1,000,000 00
Amount expended, exclusive of Wayne county.....	71,350 00
Average amount for each of the 23 counties.....	3,102 00
Number of jails having prisoners on the first day of May, 1900.....	65
Number having no prisoners on that day.....	18
Aggregate number in county jails on that day.....	552
Average for each county having prisoners.....	8.3
Number that were males, 523; or 92 per cent.	
Number that were females, 29; or 8 per cent.	
Number that were native born, 287; or 70 per cent.	
Number that were foreign born, 165; or 30 per cent.	

Crimes and offenses charged: Murder, 14; larceny, 93; burglary, 21; robbery, 1; forgery, 18; embezzlement, 6; false pretenses, 4; rape, 18; malicious injury to property, 8; assault, 4; assault and battery, 23; non-support, 5; drunkenness, 22; disorderly, 191; tramps, 35; insane, 14. Total, 552.

CHARTERED CITIES

INDUSTRIAL AND STATISTICAL REVIEW

INCLUDING

FIRE AND POLICE DEPARTMENTS

STATISTICS OF CHARTERED CITIES.

ADRIAN—Population, 9,654; has city hall, value \$20,000; five school houses, value \$200,000; in 1900 expended \$12,000 for paving; brick used for paving; \$2,100 for sewers; \$5,000 for other permanent improvements; a total of \$19,100 for permanent public improvements; has no city indebtedness; 50 per cent of public work done by the city; 50 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has a paid fire department, consisting of four full time men, and 22 part time men; full time men receive \$50 per month; part time men \$100 per year; chief \$200 per year; men are allowed off seven days each year; 60 calls were made on department in past year, of which 13 were false alarms; estimated value of property destroyed \$8,105; saved \$75,000. Has chief of police, four regular men, three deputy sheriffs, four constables and six night-watchers doing duty in the city; salary of chief \$800; regular men \$1.65 per day; has city jail in which one prisoner was confined on the first day of May, 1900. Willard Stearns, mayor; Henry Bowen, chief fire department; Frank J. Ulrich, chief of police.

ALBION—Population, 4,519; has no city hall; has five school houses and two other public buildings, value not given; in 1900 expended \$14,500 for permanent public improvements; has \$72,061 indebtedness; 75 per cent of public work done by city; 25 per cent done by contract; average wages paid day laborers \$1.50 per day; for man and team \$3.00. Has a paid fire department, consisting of one full time man and 22 part time men; full time man receives \$520 per year; part time men 25 cents per hour, actual service; chief \$100 per year; no time allowed off; 13 calls were made on department during the past year, of which three were false alarms; estimated value of property destroyed \$15,000; saved \$40,000. Has city marshal, one deputy sheriff, three constables and two night-watchers doing duty in the city; salary of marshal \$600; has city jail in which no prisoners were confined on the first day of May, 1900. C. W. Dalrymple, mayor; P. M. Dearing, chief fire department; F. W. Clark, marshal.

ALPENA—Population, 11,802; has no city hall; eight school houses, value \$80,000; two other public buildings, value \$5,000; in 1900 expended nothing for permanent public improvements; has \$25,000 city indebtedness; 66 per cent of public work done by the city; 34 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department, consisting of three full time men and 12 part time men; full time men receive \$50 per month; part time men \$2.00

per fire and \$1.00 for false alarms; chief \$400 per year; men are allowed off 12 days each year; 117 calls were made on the department the past year, of which 33 were false alarms; estimated value of property destroyed and saved not given. Has chief of police, five regular men, two deputy sheriffs, three constables and two night-watchers doing duty in the city, also a police matron; salary of chief \$800; regular men \$1.67 per day; matron \$5.00 per year; has city jail, in which no prisoners were confined on the first day of May, 1900. Michael O'Brien, mayor; A. L. Power, chief fire department; J. C. Fockler, chief of police.

ANN ARBOR—Population, 14,509; has no city hall; has seven school houses; value \$250,000; three other public buildings, value \$20,000; in 1900 expended \$500 for parks; \$30,000 for paving; brick used for paving; \$2,000 for sewers; \$2,500 for other permanent improvements; a total of \$35,000 for permanent public improvements; city indebtedness \$29,274; 25 per cent of public work done by city; 75 per cent by contract; average wages paid day laborers \$1.50; man and team \$3.00. Has paid fire department, consisting of nine full time men and five part time men; full time men receive \$50 per month; part time men \$8.00 per month; men are allowed off 35 days each year; 71 calls were made on department in past year, of which five were false alarms; estimated value of property destroyed \$28,771; saved \$76,000. Has city marshal, four regular men, five deputy sheriffs and four constables doing duty in city; salary of marshal \$900; regular men \$1.65 per day; has no city jail. Gottlob Luick, mayor; Fred Siple, chief fire department; William Gerstner, marshal.

AU SABLE—Population, 1,116; has city hall, value \$1,000; two school houses, value \$2,000; in 1900 expended \$500 for permanent public improvements; city indebtedness \$15,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.50. Has volunteer fire department, consisting of twenty part time men, who receive \$2.00 each per fire and \$1.00 for false alarms; chief receives \$50 per year; 11 calls were made on department last year; estimated value of property destroyed \$500; saved \$1,000. Has city marshal, one regular man, one deputy sheriff, three constables and one night-watch doing duty in city; salary of marshal \$365; regular men \$1.00 per day; has city jail in which no persons were confined on the first day of May, 1900. George Sutherland, mayor; James Quinn, chief of fire department; James Cleve, marshal.

BATTLE CREEK—Population, 18,563; has city hall, value \$4,000; nine school houses, value \$400,000; in 1900 expended \$3,000 for parks; \$15,000 for paving; brick used for paving; \$14,000 for sewers; \$5,000 for other permanent improvements; a total of \$37,000 for permanent public improvements; city indebtedness \$200,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department, consisting of ten full time men and eight part time men; full time men receive \$12 per week; part time men \$8.25 per month; chief \$900 per year; men are allowed off 59 days each year; 68 calls were made on department in past year, of which six were

false alarms; estimated value of property destroyed \$5,887; saved \$324,860. Has chief of police, nine regular men, two deputy sheriffs, five constables and six night-watchers, also a police matron doing duty in city; men are allowed off 10 days each year; salary of chief \$900; regular men \$1.71 per day; matron \$3.00 per call; has city jail, in which one prisoner was confined on the first day of May, 1900. L. M. Gillette, mayor; W. P. Weeks, chief fire department; W. H. Farrington, chief of police.

BAY CITY—Population, 27,628; has city hall, value \$200,000; eleven school houses, value \$250,000; eleven other public buildings, value \$181,000; in 1900 expended \$41,290 for paving; brick used for paving; \$14,000 for sewers; \$5,000 for other permanent improvements; a total of \$60,290 for permanent public improvements; city indebtedness \$739,000; all public work done by contract; average wages paid day laborers \$1.50; man and team \$3.00. Has paid fire department, consisting of 13 full time men and 35 part time men; full time men receive \$720 per year; part time men \$240, and \$252 per year; chief \$1,500; men are allowed off 24 days each year; 186 calls were made on department in past year, of which two were false alarms; estimated value of property destroyed \$165,000; saved \$1,500,000. Has chief of police, 24 regular men, two deputy sheriffs, four constables, two night-watchers and police matron doing duty in the city; salary of chief \$1,200; regular men \$2.00 per day; matron, \$180 per year; has city jail, in which four prisoners were confined on the first day of May, 1900. Alex. McEwan, mayor; Thomas K. Harding, chief fire department; N. N. Murphy, chief of police.

BELDING—Population, 3,282; has no city hall; four school houses; value, \$13,000; in 1900 expended \$300 for parks; \$500 for sewers; \$2,000 for other permanent improvements; a total of \$2,800 for permanent public improvements; city indebtedness \$5,000; all public work done by city; average wages paid day laborers \$1.25; for man and team, \$2.50. Has volunteer fire department, consisting of ten part time men, who receive \$20 each per year; chief \$50 per year; 13 calls were made on department in past year, of which four were false alarms; estimated value of property destroyed \$750; saved \$4,000. Has city marshal, one regular man, one deputy sheriff, three constables and one night-watcher doing duty in the city; salary of marshal \$600; regular man \$1.75; has city jail, in which no prisoners were confined on the first day of May, 1900. W. M. Francisco, mayor; Robert Peebles, chief fire department; W. W. Mitchell, marshal.

BENTON HARBOR—Population, 6,562; has city hall, value \$4,000; four school houses, value \$45,000; one other public building, value, \$3,000; in 1900 expended \$20,000 for paving; asphalt used in paving; \$5,000 for sewers; \$5,000 for other permanent improvements; a total of \$30,000 for permanent public improvements; city indebtedness \$100,000; 20 per cent of public work done by city; 80 per cent by contract; average wages paid day laborers \$1.50; for man and team \$2.00. Has a volunteer fire department, consisting of 28 part time men, who are paid for actual service; chief \$80 per year; 42 calls were made on department in

past year, of which 11 were false alarms; estimated value of property destroyed \$15,000; saved not reported. Has chief of police, five regular men, four constables and three night-watchers doing duty in the city; salary of chief \$720; regular men \$1.50 per day; has city jail, in which no prisoners were confined on the first day of May, 1900. H. A. Foeltzer, mayor; C. A. Johnson, chief fire department and chief of police.

BESSEMER—Population, 3,911; has city hall, value \$8,000; four school houses, value \$29,000; in 1900 expended \$4,000 for public buildings; \$5,000 for other permanent improvements; a total of \$9,000 for permanent public improvements; city indebtedness \$53,200; all public work done by city; average wages paid day laborers \$1.75; for man and team \$5.75. Has a paid fire department, consisting of two full time men and 20 part time men; full time men receive \$55 per month; part time men \$1.00 per fire; chief \$25 per year; 19 calls were made on department in past year, of which one was false alarm; estimated value of property destroyed not reported; saved \$41,300. Has city marshal, two regular men and three constables doing duty in city; salary of marshal \$840 per year; regular men \$2.00 per day; has city jail in which no prisoners were confined on the first day of May, 1900. Iver Hagen, mayor; W. Brown, chief fire department; George Steiner, marshal.

BIG RAPIDS—Population 4,686; has no city hall; four school houses, value \$40,000; in 1900 expended \$400 for sewers; city indebtedness \$84,000; 10 per cent of public work done by city; 90 per cent by contract; average wages paid day laborers \$1.25; for man and team \$2.50. Has volunteer fire department, consisting of 48 men, who receive \$1.00 for each alarm; chief receives \$100 per year; 40 calls were made on the department in past year, of which two were false alarms; no record kept of property destroyed and saved. Has city marshal, two deputy sheriffs, five constables and one night-watcher doing duty in the city; salary of marshal \$480; has city jail, in which no prisoners were confined on the first day of May, 1900. E. C. Newcombe, mayor; J. F. Clark, chief fire department; E. W. Ford, marshal.

CADILLAC—Population, 5,997; has no city hall; five school houses; value \$60,000; one other public building, value \$1,500; in 1900 expended \$10,000 for public buildings; \$500 for parks; \$1,500 for sewers; a total of \$12,000 for permanent public improvements; city indebtedness \$28,000; 10 per cent of public work done by city; 90 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has volunteer fire department, consisting of 61 men, who are paid \$1.00 per fire; chief \$100 per year; 17 calls were made on department in past year, of which one was false alarm; estimated value of property destroyed \$80,020; saved \$85,430. Has chief of police, two regular men, two deputy sheriffs, four constables and four night-watchers doing duty in the city; salary of chief \$800; regular men \$1.67 per day; has no city jail. Henry Knowlton, mayor; Silas W. Huckleberry, chief fire department and chief of police.

CHARLOTTE—Population, 4,092; has no city hall; has six school houses, value \$30,000; one other public building, value \$3,000; in 1900 expended nothing for permanent public improvements; city indebtedness \$25,000; 50 per cent public work done by city; 50 per cent by contract; average wages paid day laborers \$1.50; man and team \$3.00. Has paid fire department, consisting of one full time man, and 16 part time men; full time man receives \$40 per month; part time men \$25 each per year; chief \$75 per year; 38 calls were made on department in past year, of which six were false alarms; estimated value of property destroyed \$20,000; saved \$60,000. Has city marshal, three regular men, one deputy sheriff, four constables and one night-watcher doing duty in city; salary of marshal \$480; regular men \$1.33 per day; has no city jail. R. D. Wheaton, mayor; D. J. Donovan, chief fire department; C. F. Gibbons, Marshal.

CHEBOYGAN—Population, 6,489; has city hall, value \$30,000; six school houses, value \$46,200; four other public buildings, value \$6,500; in 1900 expended nothing for permanent public improvements; city indebtedness \$68,500; all public work done by city; average wages paid day laborers \$1.50; man and team \$3.25. Has paid fire department, consisting of three full time men, and seven companies of 25 part time men, each; full time men receive an average \$800 per year; part time men \$1.00 per run; chief \$100 per year; 27 calls were made on department in past year, of which five were false alarms; estimated value of property destroyed \$20,000; saved \$90,000. Has city marshal, three regular men, one deputy sheriff, three constables and three night-watchers doing duty in the city; salary of marshal \$700; regular men \$1.40 per day; has city jail, in which no prisoners were confined on the first day of May, 1900. L. C. Pelton, mayor; Alex. Grieve, chief fire department; David Clark, marshal.

CLARE—Population, 1,326; has city hall, value \$2,000; one school house, value \$20,000; two other public buildings, value \$1,000; in 1900 expended \$250 for public buildings; \$250 for repairs in paving; \$500 for other permanent improvements; a total of \$1,000 for permanent public improvements; city indebtedness \$700; all public work done by the city; average wages paid day laborers \$1.25; for man and team \$3.00. Has volunteer fire department of 28 men, who receive 50 cents for an alarm, 50 cents for first hour of fire and 25 cents for each hour thereafter; 14 calls were made on department in past year, of which five were false alarms; estimated value of property destroyed \$8,000; saved \$20,000. Has city marshal, one deputy sheriff and three constables doing duty in the city; salary of marshal \$75 per year; has city jail in which no prisoners were confined on the first day of May, 1900. R. M. Mussell, mayor; A. R. Canfield, chief fire department; Walter Parmeter, marshal.

COLDWATER—Population, 6,216; has city hall, value \$5,000; four school houses, value \$80,000; one other public building, value \$15,000; in 1900 expended \$300 for parks; \$5,000 for sewers; \$5,000 for other permanent improvements; a total of \$10,300 for permanent public improvements; city indebtedness \$77,000; 50 per cent of public work done by

city; 50 per cent by contract; average wages paid day laborer \$1.50; for man and team \$3.00; has paid fire department consisting of two full time men, and 12 part time men; full time men receive \$45 per month; part time \$50 per year; chief \$75 per year; 12 calls were made on the department in past year of which one was a false alarm; estimated value of property destroyed \$5,500; saved \$50,000; has chief of police, one regular man, one deputy sheriff, two constables and two night-watchers doing duty in the city; chief receives \$800; regular man \$1.50 per day; has city jail in which two prisoners were confined on the first day of May, 1900. Clayton C. Johnson, mayor; Frank Holt, chief fire department; D. A. Buck, chief of police.

CORUNNA—Population, 1,510; has city hall; value \$10,000; one school house, value \$18,000; in 1900 expended \$5,000 for parks; city indebtedness \$15,000; 10 per cent of public work done by city; 90 per cent by contract; average wages paid day laborers \$1.25; man and team \$2.50; has a volunteer fire department consisting of 20 men who are paid for actual service; three calls were made on department in past year, of which one was false alarm; estimated value of property destroyed \$400; saved \$1,000; has city marshal, two deputy sheriffs, two constables and one night-watcher doing duty in the city; salary of marshal \$50 per year; has no city jail. W. A. Rosenkrans, mayor; S. B. Lyman, chief fire department; A. A. Frain, marshal.

CRYSTAL FALLS—Population, 3,231; has city hall, value \$1,500; no other public buildings; in 1900 expended nothing for permanent public improvements; city indebtedness \$80,000; 50 per cent of public work done by city, and 50 per cent by contract; average paid day laborers \$2.00; for man and team \$4.00; has volunteer fire department consisting of 25 men who receive \$2.00 per call; chief \$75 per year; eight calls were made on the department in past year of which two were false alarms; estimated value of property destroyed \$3,000; saved \$4,500; has city marshal, two regular men, one deputy sheriff, two constables and one night-watcher doing business in the city; salary of marshal \$350; regular men \$2.00 per day; has no city jail. C. T. Roberts, mayor; J. H. Johnson, chief fire department; John Trombley, marshal.

DETROIT—Population, 285,704; has city hall, value \$2,130,430; 69 school houses, value \$2,214,130; 61 other public buildings, value (including land), \$3,507,490; in 1900 expended \$406,915 for public buildings; \$81,355 for parks; \$335,885 for paving; cedar on concrete, brick on concrete, and asphalt used for paving; \$137,705 for sewers; \$59,625 for other permanent improvements; a total of \$1,021,485 for permanent public improvements; city indebtedness \$4,863,568; 10 per cent of public work done by city; 90 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.50. Has paid fire department consisting of 421 men who receive an average of \$943 per year each; chief \$3,000; men are allowed off 64 days each year; 1,210 calls were made on the department during past year, of which 20 were false alarms; estimated value of property destroyed \$633,000; saved \$5,205,645. Has chief of police, 513 regular men, 17 constables, five night-watchers and seven matrons doing duty in city; salary of chief \$4,000 per year;

average salary of regular men \$3.33 per day; matrons \$600 per year; men are allowed off 10 days each year; has 12 police stations in which 18 prisoners were confined on the first day of May, 1900. William C. Maybury, mayor; F. A. Blades, comptroller; John Kendall, chief fire department; John Martin, chief of police.

DOWAGIAC—Population, 4,151; has city hall, value \$2,000; two school houses, value \$30,000; in 1900 expended \$1,000 for paving; stone used for paving; \$25,000 for other permanent improvements; a total of \$26,000 for permanent public improvements; city indebtedness \$20,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department, consisting of three full time men and 35 part time men; full time men receive \$60 per month; part time men \$2.00 for first hour and \$1.00 for each hour thereafter; nine calls were made on department in past year, of which one was false alarm; estimated value of property destroyed \$2,500; saved \$2,000. Has city marshal, one regular man, one deputy sheriff, three constables and one night-watcher doing duty in city; men are allowed off 10 days each year; salary of marshal \$50 per year; regular man \$1.00 per day; has city jail in which two prisoners were confined on the first day of May, 1900. F. W. Richey, mayor; E. B. Jewell, chief fire department; D. A. Secor, city marshal.

EAST TAWAS—Population, 1,736; has city hall, value \$2,000; four school houses, value \$2,000; five other public buildings, value \$4,000; in 1900 expended nothing for permanent public improvements; city indebtedness, \$36,000; all public work done by city; average wages paid day laborers \$1.50; for man team \$3.00. Has volunteer fire department consisting of 22 part time men who are paid for actual service; 12 calls were made on department in past year of which two were false alarms; estimated value of property destroyed \$2,500; saved \$5,000. Has city marshal, one deputy sheriff and three constables doing duty in city; salary of marshal \$472; has city jail in which no prisoners were confined on the first day of May, 1900. C. W. Luce, mayor; James E. Dillon, chief fire department; Rufus Crossman, city marshal.

EATON RAPIDS—Population, 2,103; has city hall, value \$2,000; four school houses, value \$6,000; two other public buildings, value \$5,000; in 1900 expended \$500 for permanent public improvements; city indebtedness \$25,000; 80 per cent of public work done by city; 20 per cent by contract; average wages paid day laborers \$1.25; for man and team \$2.50. Has volunteer fire department consisting of 20 men; salary of men 50 cents the first hour actual service, 25 cents thereafter, also one man for six months at \$30 per month; 12 calls were made on department in past year, two of which were false alarms; estimated value of property destroyed \$1,650; saved \$7,800. Has city marshal, one deputy sheriff, three constables and one night-watcher doing duty in city; salary of marshal \$360 per year; has city jail in which no prisoners were confined on the first day of May, 1900. J. W. Sheldon, mayor; George D. Rushton, chief fire department; Michael Cronan, city marshal.

ESCANABA—Population, 9,549; has no city hall; four school houses, value \$50,000; five other public buildings, value \$3,000; in 1900 expended \$8,000 for public buildings; \$1,000 for parks; \$1,000 for repairs in paving; \$1,200 for sewers; \$7,000 for other permanent improvements; a total of \$18,200 for permanent public improvements; city indebtedness \$98,000; all public work done by city; average wages paid day laborers \$1.75; for man and team \$3.75. Has paid fire department consisting of six full time men and eight part time men; salary of chief \$1,000 per year; full time men \$60 per month; part time men \$1.00 per call, 50 cents after first hour; men are allowed off 52 days each year; 57 calls were made on department in past year; estimated value of property destroyed \$233,000; saved \$100,000. Has city marshal, three regular men, two deputy sheriffs, three night-watchers and one police matron doing duty in city; salary of marshal \$780; regular men \$1.83 per day; matron \$300; has city jail in which no prisoners were confined on the first day of May, 1900. J. M. Hartnett, mayor; James Tolan, chief fire department; A. Gaborn, city marshal.

FLINT—Population, 13,103; has city hall, value \$10,000; eight school houses, value \$145,000; three other public buildings, value \$4,000; in 1900 expended \$25,000 for paving; one-half paving brick, one-half cedar block; \$1,000 for sewers; a total of \$26,000 for permanent public improvements; city indebtedness \$12,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department, consisting of eight full time men and two part time men; average salary of full time men \$550; part time men \$10 per month; chief \$720; men are allowed off 10 days each year; 125 calls were made on department in past year of which 13 were false alarms; estimated value of property destroyed \$103,980; saved \$400,850. Has city marshal, four regular men, five deputy sheriffs, four constables and three night-watchers doing duty in city; salary of marshal \$600 per year; regular men \$1.50 per day; men are allowed off 10 days each year; has no city jail. Charles A. Cummings, mayor; John J. Rose, chief fire department; Peter Carton, city marshal.

GLADSTONE—Population, 3,380; has city hall, value \$3,500, three school houses, value \$15,000; three other public buildings, value \$500; in 1900 expended \$2,000 for paving; gravel used for paving; \$4,000 for other permanent improvements; a total of \$6,000 for permanent public improvements; city indebtedness \$79,500; 75 per cent of public work done by city; 25 per cent by contract; average wages paid day laborers \$1.75; for man and team \$4.00. Has paid fire department, consisting of two full time men, and 16 part time men; salary of chief \$900; average salary of full time men \$630; part time men receive no compensation; 28 calls were made on the department in the past year, of which nine were false alarms; estimated value of property destroyed \$600; saved \$3,000. Has city marshal, two regular men, one deputy sheriff and one night-watcher doing duty in city; salary of marshal \$720; regular men \$2.00 per day; has city jail in which no prisoners were confined on the first day of May, 1900. T. C. Lawler, mayor; William A. Miller, chief fire department; George Bushman, city marshal.

GLADWIN—Population, 775; has no city hall; one school house value \$2,500; in 1900 expended \$150 for repairs on paving; \$6,000 for sewers; a total of \$6,150 for permanent public improvements; city indebtedness \$5,000; all public work done by city; average wages paid day laborers \$1.35; for man and team \$3.00. Has volunteer fire department consisting of 17 men; five calls were made on department in past year of which two were false alarms; estimated value of property destroyed \$80,000; saved \$200,000. Has city marshal, two deputy sheriffs, four constables and one night-watcher doing duty in city; salary of marshal \$365; has no city jail. J. W. Leininger, mayor; P. D. Smith, chief fire department, Herbert Shell, marshal.

GRAND HAVEN—Population, 4,743; has city hall, value \$4,000; four school houses, value \$30,000; in 1900 expended \$800 for graveling streets; city indebtedness \$53,508; all public work done by city; average wages paid day laborers \$1.25; for man and team \$3.00. Has volunteer fire department, consisting of 28 men, who receive \$85 for the year; chief \$200; 61 calls were made on the department in the past year; estimated value of property destroyed \$3,450; saved \$23,560. Has city marshal, one regular man, two deputy sheriffs and one night-watcher doing duty in city; salary of marshal \$500; regular man \$1.50 per day; has no city jail. J. W. O'Brien, mayor; John Fisher, chief fire department; Cornelius Vander Noot, city marshal.

GRAND LEDGE—Population, 2,161; has city hall, value \$4,000; two school houses, value \$20,000; one other public building, value \$50,000; in 1900 expended \$500 for sewers; \$2,000 for other permanent improvements; a total of \$2,500 for permanent public improvements; city indebtedness \$7,000; 33 per cent of public work done by city; 67 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has volunteer fire department consisting of 10 men, who each receive \$25 per year and \$2.00 per fire; 13 calls were made on department in past year, of which four were false alarms; estimated value of property destroyed \$900; saved \$40,000. Has a city marshal, one deputy sheriff and two constables doing business in city; salary of marshal \$360; has city jail in which no prisoners were confined on the first day of May, 1900. W. E. Davis, mayor; Robert Smith, chief of the fire department; O. A. Halladay, marshal.

GRAND RAPIDS—Population, 87,565; has city hall, value \$300,000; 35 school houses, value \$1,200,000; 20 other public buildings, value \$150,000; in 1900 expended \$10,000 for public buildings; \$22,000 for parks; \$115,000 for paving; brick, asphalt and macadam used in paving; \$7,000 for sewers; \$26,000 for other permanent improvements; a total of \$180,000 for permanent public improvements; city indebtedness \$1,957,500; 10 per cent of public work done by city; 90 per cent by contract; average wages paid day laborers \$1.75; for man and team \$3.00. Has paid fire department, consisting of 124 full time men, who receive an average salary of \$698; chief \$2,000; 24 days allowed off each year; 431 calls were made on department in past year, of which 44 were false alarms; estimated value of property destroyed \$116,480; no record kept of property

saved. Has a chief of police, 102 regular men, 12 deputy sheriffs, 12 constables, 38 night-watchers and six police matrons doing duty in city; salary of chief \$2,300; regular men average \$2.05 per day; matrons \$600; six days allowed off each year; has city jail in which no prisoners were confined on the first day of May, 1900. George R. Perry, mayor; Henry Lemoine, chief fire department; H. O. Carr, chief of police.

GREENVILLE—Population, 3,381; has no city hall; four school houses, value \$30,000; one other public building, value \$3,000; in 1900 expended \$300 for parks; \$500 for sewers; \$700 for other permanent improvements; a total of \$1,500 for permanent public improvements; city indebtedness \$16,000; all public work done by city; average wages paid day laborers \$1.35; for man and team \$2.75. Has a volunteer fire department consisting of 10 men, who receive an average salary of \$200 each; chief \$75; 16 calls were made on department in past year; of which three were false alarms; estimated value of property destroyed \$10,050; saved \$43,000. Has city marshal, one regular man, one deputy sheriff, three constables and one night-watcher doing duty in city; salary of marshal \$60 per year; regular man \$1.50 per day; has a city jail in which no prisoners were confined on the first day of May, 1900. W. G. Nelson, mayor; R. P. Russell, chief fire department; Joseph Rhodes, marshal.

HARRISON—Population, 647; has no city hall; one school house, value \$5,000, one public building, value \$500; in 1900 expended \$500 for parks; \$500 for other permanent improvements; a total of \$1,000 for permanent public improvements; has no city indebtedness; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department consisting of 13 men, who receive 50 cents for first hour actual service and 25 cents thereafter; two calls were made on the department in past year of which one was a false alarm; no record kept of property saved and destroyed. Has a city marshal, and one deputy sheriff doing duty in the city; salary of marshal \$25 per year; has no city jail. George F. Drake, mayor; Reginald Sharp, chief of fire department; John R. Brown, city marshal.

HASTINGS—Population, 3,172; has a city hall, value \$9,404; four school houses, value \$59,000; in 1900 expended nothing for permanent public improvements; city indebtedness \$27,000; all public work done by city; average wages paid day laborers \$1.50; for man and team, \$3.00. Has volunteer fire department consisting of 24 men, who receive \$20 per year each; chief \$40; there were eight calls on department in past year; estimated value of property destroyed \$25,000; saved \$15,000. Has a city marshal, one regular man, one deputy sheriff, four constables and one night-watcher doing duty in city; salary of marshal \$400; regular man \$1.50 per day; has no city jail; D. W. Rogers, mayor; N. A. Newton, chief fire department; Baker Shriner, marshal.

HILLSDALE—Population, 4,151; has no city hall; has five school houses, value \$40,000; in 1900 expended \$500 for sewers; \$3,500 for other permanent improvements; a total of \$4,000 for permanent public improvements; city indebtedness \$40,000; all public work done by city;

average wages paid day laborers \$1.50; for man and team \$3.00. Has a paid fire department consisting of two full time men and 14 part time men; full time men receive \$420 per year; part time men, \$22.50 per year; chief \$75.00; 23 calls were made on department in past year, of which three were false alarms; estimated value of property destroyed, \$5,530; saved \$16,800. Has a city marshal, one regular man, one deputy sheriff, four constables and one night-watcher doing duty in city; salary of marshal \$750; regular man \$2.50 per day; has no city jail; H. C. Blackman, mayor; Henry C. Schaefer, chief fire department; R. J. Corlett, chief of police.

HOLLAND—Population, 7,790; has a city hall, value \$10,000; five school houses, value \$80,000; one other public building, value \$10,000; in 1900 expended \$500 for public buildings; \$500 for parks; \$10,000 for sewers; \$3,000 for other permanent improvements; a total of \$14,000 for permanent public improvements; city indebtedness \$85,450; 60 per cent of public work done by city; 40 per cent by contract; average wages paid day laborers \$1.25; for man and team \$2.50. Has paid fire department consisting of two full time men and 26 part time men; full time men receive \$500 per year; part time men \$25 per year; chief \$100 per year; 38 calls were made on department in the past year, of which 15 were false alarms; estimated value of property destroyed by fire \$825; no record kept of property saved. Has a city marshal, one regular man, three deputy sheriffs, four constables and one night-watcher doing duty in the city; salary of marshal \$600; regular man \$1.50 per day; has a city jail in which no prisoners were confined on the first day of May, 1900; William Brusse, mayor; Wm. Van Eyck, city clerk; L. T. Kanters, chief fire department; H. J. Dykhuis, city marshal.

HUDSON—Population, 2,403; has city hall, value \$2,000; three school houses, value \$30,000; two other public buildings, value \$3,500; in 1900 expended \$500 for permanent public improvements; city indebtedness \$34,000; all public work done by city; average wages paid day laborers \$1.25; for man and team \$2.50. Has volunteer fire department consisting of 32 men, who receive \$10 per year each; chief \$20 per year; seven calls were made on department in past year, three of which were false alarms; no record kept of property destroyed and saved. Has city marshal, one deputy sheriff, three constables and two night-watchers doing duty in city; salary of marshal \$300; has city jail, in which one prisoner was confined on the first day of May, 1900. O. R. Pierce, mayor; Fred P. George, city clerk; Eugene Knapp, chief fire department; A. W. Cooper, city marshal.

IONIA—Population, 5,209; has city hall, value \$500; four school houses, value \$20,000; in 1900 expended \$4,000 for permanent public improvements; city indebtedness \$42,000; 25 per cent of public work done by city; 75 per cent by contract; average wages paid day laborers \$1.50; for man and team \$2.50. Has paid fire department consisting of one full time man and 28 part time men; full time man receives \$50 per month; part time men \$40 per year each; chief \$150 per year; 39 calls were made on department in past year, of which three were false alarms; estimated value of property destroyed \$7,000; saved \$2,000.

Has city marshal, three regular men, three deputy sheriffs, four constables and four night-watchers doing duty in city; salary marshal \$720; regular men \$1.50 per day; has no city jail. James Scully, mayor; Edward R. Bailey, chief fire department; R. L. Redensky, marshal.

IRON MOUNTAIN—Population, 9,242; has city hall, value \$9,200; six school houses, value \$125,000; one other public building, value \$2,000; in 1900 expended \$2,000 for public buildings; \$2,000 for sewers; \$8,000 for other permanent improvements; a total of \$12,000 for permanent public improvements; city indebtedness \$31,000; 75 per cent of public work done by city; 25 per cent by contract; average wages paid day laborers \$1.60; for man and team \$4.00. Has paid fire department consisting of five full time men; salary of chief \$950 per year; men \$720 per year each; men are allowed off 10 days each year; 62 calls were made on department in past year; estimated value of property destroyed by fire \$584; saved \$7,536. Has chief of police, five regular men, one deputy sheriff and three constables doing duty in city; salary of chief \$9.50; regular men \$2.00 per day; men are allowed off 12 days each year; has city jail in which no prisoners were confined on the first day of May, 1900. Alfred Cruse, mayor; James D. Cudlip, city clerk; B. E. Jussen, chief fire department; E. J. Harvey, chief of police.

IRONWOOD—Population, 9,705; has city hall, value \$40,000; eight school houses, value \$86,000; in 1900 expended \$5,000 for sewers; city indebtedness \$77,000; all public work done by city; average wages paid day laborers \$1.75; for man and team \$3.50. Has paid fire department consisting of four full time men and 26 part time men; full time men receive \$660 per year; part time men \$1.50 per month; chief \$300 per year; men are allowed off 26 days per year; 21 calls were made on department in past year, of which two were false alarms; estimated value of property destroyed \$1,225; saved \$15,000. Has city marshal, four regular men, one deputy sheriff, one constable and three night-watchers doing duty in city; salary of marshal \$900 per year; regular men \$1.83 per day; has city jail in which no prisoners were confined on the first day of May, 1900. D. E. Sutherland, mayor; J. H. Renz, chief fire department; Thomas Jeffery, chief of police.

ISHPEMING—Population, 13,255; has city hall, value \$40,000; six school houses, value \$120,000; four other public buildings, value \$18,000; in 1900 expended \$20,000 for public buildings; \$10,000 for paving; macadam used for paving; a total of \$30,000 for permanent public improvements; city indebtedness \$120,000; all public work done by city; average wages paid day laborers \$1.75; for man and team \$4.00. Has paid fire department consisting of three full time men and 60 part time men; average salary of full time men \$700 per year; part time men are divided into three companies, each company receives \$200 per year; chief \$150 per year; 23 calls were made on department in past year; estimated value of property destroyed \$9,155; no record kept of property saved. Has chief of police, eight regular men, two deputy sheriffs, four constables and five night-watchers doing duty in city; salary of chief \$840; regular men \$2.07 per day; has city jail in which one prisoner was confined on the first day of May, 1900. F. Braastad, mayor; J. S. Menie, chief fire department; John Farm, chief of police.

JACKSON—Population, 25,180; has no city hall; has 16 school houses, value \$200,000; six other public buildings, value \$218,000; in 1900 expended \$50,000 for sewers; \$25,000 for other permanent improvements; a total of \$75,000 for permanent public improvements; city indebtedness \$314,000; 90 per cent of public work done by city; 10 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of 30 full time men; who receive an average of \$55 per month each; chief \$1,000 per year; 46 days are allowed off each year; 146 calls were made on department in past year of which nine were false alarms; estimated value of property destroyed by fire \$54,395; saved \$693,950. Has chief of police, 20 regular men, four deputy sheriffs, two constables and five night-watchers doing duty in city; salary of chief \$1,200; regular men \$2.08; seven days allowed off each year; has city jail in which one prisoner was confined on the first day of May, 1900. W. M. Palmer, mayor; Benjamin F. King, chief fire department; John Boyle, chief of police.

KALAMAZOO—Population, 24,404; has a city hall, value \$15,000; eight school houses, value \$150,000; two other public buildings, value \$80,000; in 1900 expended \$5,000 for public buildings; \$4,000 for parks; \$25,000 for paving; brick on concrete foundation used for paving; \$20,000 for sewers; a total of \$54,000 for permanent public improvements; city indebtedness \$30,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of 18 full time and 14 part time men; full time men receive \$55 per month; part time men \$10 per month; chief \$1,350; men are allowed off 10 days each year; 104 calls were made on department in past year; number false alarms not returned; estimated value of property destroyed \$36,000; saved \$500,000. Has chief of police, 19 regular men, four deputy sheriffs, four constables, four night-watchers and a police matron doing duty in city; salary of chief \$1,000; regular men \$1.90 per day; matron \$250; men are allowed off 10 days each year; has no city jail. Alfred J. Mills, mayor; B. J. Healy, chief fire department; F. B. Greenfield, chief of police.

LANSING—Population, 16,485; has city hall, value \$125,000; eight school houses, value \$161,000; 12 other public buildings, value \$296,000; in 1900 expended nothing for permanent public improvements; city indebtedness \$435,000; 33 per cent of public work done by city; 67 by contract; average wages paid day laborers \$1.50; for man and team \$2.50. Has paid fire department consisting of four full time men and 17 part time men; full time men receive \$50 per month; part time men an average of \$231.50 per year each; chief \$350; 30 days allowed off each year; 131 calls were made on department in past year, of which seven were false alarms; estimated value of property destroyed \$71,704; saved not reported. Has chief of police, 11 regular men, four deputy sheriffs, three constables and a police matron doing duty in city; salary of chief \$900; regular men \$1.85 per day; matron \$1.25 per day; seven days allowed off each year; has a city jail in which seven prisoners were confined on the first day of May, 1900. C. J. Davis, mayor; T. H. Sedina, chief fire department; John P. Sanford, chief of police.

LAPEER—Population, 3,297; has a city hall, value \$7,000; four school houses, value \$36,000; two other public buildings, value \$17,000; in 1900 expended \$2,200 for sewers; \$3,500 for other permanent improvements; a total of \$5,700 for permanent public improvements; city indebtedness \$48,000; all public work done by city; average wages paid day laborers \$1.25; for man and team \$2.50. Has volunteer fire department consisting of 10 men; chief and men receive \$1.00 per fire each; 18 calls were made on department in past year, of which four were false alarms; estimated value of property destroyed \$3,450; saved \$21,500. Has city marshal, two deputy sheriffs and four constables doing duty in city; salary of marshal \$500 per year; has no city jail. Henry Schlegel, mayor; S. J. Edmunds, chief fire department; George C. Rogers, marshal.

LUDINGTON—Population, 7,166; has city hall, value \$20,000; five school houses, value \$120,000; two other public buildings, value \$5,000; in 1900 expended \$500 for parks; \$23,000 for paving; macadam used for paving; \$1,000 for sewers; \$500 for other permanent improvements; a total of \$25,000 for permanent public improvements; city indebtedness \$110,000; 90 per cent of public work done by city; 10 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has volunteer fire department consisting of 27 men, who receive \$75 per year each; chief \$115; 32 calls were made on department in past year, of which two were false alarms; estimated value of property destroyed and saved not reported. Has city marshal, three regular men, two deputy sheriffs, six constables and two night-watchers doing duty in city; salary of marshal \$600; regular men \$1.50 per day; has a city jail in which no prisoners were confined on the first day of May, 1900. B. J. Goodsell, mayor; O. W. Tripp, chief of fire department; Ole Anderson, marshal.

MACKINAC ISLAND—Population, 665; has city hall, value \$3,000; one school house, value \$3,000; three other public buildings, value \$7,000; in 1900 expended \$2,500 for sewers; city indebtedness \$9,000; all public work done by city; average wages paid day laborers \$1.75; for man and team \$3.50. Has no organized fire department; made one run in past year; estimated value of property destroyed \$5,000; saved \$50,000. Has city marshal, one deputy sheriff, two constables and two night-watchers doing duty in city; salary of marshal \$500; has city jail in which no prisoners were confined on the first day of May, 1900. M. G. Bailey, mayor and chief fire department; James Lasley, city marshal.

MANISTEE—Population, 14,260; has no city hall; has six school houses, value \$150,000; one other public building, value \$13,500; in 1900 expended \$2,000 for public buildings; \$5,000 for paving; crushed stone used for paving; \$2,000 for sewers; \$2,000 for other permanent public improvements; a total of \$11,000 for permanent public improvements; city indebtedness \$200,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.50. Has paid fire department consisting of nine full time men, who receive \$53 per month each; chief \$900 per year; men are allowed off 30 days each year; 116 calls were made on department in past year; estimated value of property destroyed \$22,525; saved \$175,000. Has city marshal, seven regular men,

three deputy sheriffs, seven constables and one night-watcher doing duty in city; salary of marshal \$800; regular men \$2.00 per day; men are allowed off seven days each year; has no city jail. C. J. Canfield, mayor; Thomas Scott, chief fire department; Frank Gooderan, marshal.

MARINE CITY—Population, 3,829; has city hall, value \$18,000; three school houses, value \$30,000; one other public building, value \$3,000; in 1900 expended \$2,000 for paving; \$4,000 for other permanent improvements; a total of \$6,000 for permanent public improvements; city indebtedness \$47,000; 67 per cent of public work done by city; 33 per cent by contract; average wages paid day laborers \$1.38; for man and team \$3.00. Has volunteer fire department consisting of 80 men, who receive \$5.00 each per year; salary of chief \$300; 11 calls were made on department in past year, of which three were false alarms; estimated value of property destroyed by fire \$1,500; saved \$2,000. Has city marshal, one deputy sheriff and three constables doing duty in the city; salary of marshal \$480; has city jail in which no prisoners were confined on the first day of May, 1900. William F. Sauber, mayor; A. F. Stern, city clerk; George A. Shaw, marshal.

MARQUETTE—Population, 10,058; has city hall, value \$50,000; seven school houses, value \$90,000; one other public building, value \$20,000; in 1900 expended \$3,000 for parks; \$8,000 for paving; \$2,500 for other permanent improvements; a total of \$13,500 for permanent public improvements; city indebtedness \$80,000; average wages paid day laborers \$1.75; for man and team \$4.00; 75 per cent of public work done by city; 25 per cent by contract. Has paid fire department consisting of three full time men and 30 part time men; full time men receive \$55 per month; part time men 60 cents per hour actual service; chief \$100 per year; men are allowed off seven days each year; 63 calls were made on department in past year, three of which were false alarms; estimated value of property destroyed by fire \$20,000; saved \$100,000. Has city marshal, five regular men, three deputy sheriffs, two constables and three night-watchers doing duty in city; salary of marshal \$900 per year; regular men \$2.00 per day; has a city jail in which no prisoners were confined on the first day of May, 1900. J. F. Neidhart, mayor; Timothy J. Maney, chief fire department; E. E. McIntosh, marshal.

MARSHALL—Population, 4,370; has city hall, value \$6,000; five school houses, value \$60,000; four other public buildings, value \$5,000; in 1900 expended \$1,500 for parks; \$3,500 for sewers; \$5,000 for other permanent improvements; a total of \$10,000 for permanent public improvements; city indebtedness \$101,000; all public work done by city; average wages paid day laborers \$1.50; for man and team, \$3.00. Has paid fire department consisting of two full time men and 21 part time men; full time men receive \$40 per month; part time men \$62 per year; chief \$110 per year; 11 calls were made on department in past year; estimated value of property destroyed \$3,000; saved \$1,500. Has city marshal, two regular men, two deputy sheriffs, four constables and one night-watcher doing duty in city; salary of marshal \$600 per year; regular men \$2.00 per day; has no city jail. John Powell, mayor; N. G. Brown, recorder; A. J. Flynn, chief fire department; W. D. Stone, marshal.

MASON—Population, 1,828; has no city hall; has two school houses, value \$5,000; in 1900 expended nothing for permanent public improvements; city indebtedness \$35,000; all public work done by city; average wages paid day laborers \$1.25; for man and team \$2.50. Has volunteer fire department consisting of 12 men, who receive \$20 per year; salary of chief \$25; 10 calls were made on department in past year, of which two were false alarms; estimated value of property destroyed by fire \$1,200; saved \$9,000. Has city marshal, two deputy sheriffs, two constables and one night-watcher doing duty in city; salary of marshal \$50 per year; has no city jail. Harper Reed, mayor; Felix McDaniels, chief fire department; M. A. Cotton, marshal.

MENOMINEE—Population, 12,818; has no city hall; nine school houses, value \$144,000; three other public buildings, value \$13,000; in 1900 expended \$8,000 for permanent public improvements; city indebtedness \$125,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of 17 full time men, who receive \$547 per year; chief \$1,200; men are allowed off seven days each year; 102 calls were made on department in past year, of which four were false alarms; estimated value of property destroyed by fire \$10,681; no record kept of property saved. Has city marshal, four regular men, one deputy sheriff and three constables doing duty in city; salary of marshal \$780; regular men \$1.67 per day; has no city jail. Frank Erdlitz, mayor; L. C. Collins, chief fire department; Charles H. McLeod, marshal.

MIDLAND—Population, 2,363; has no city hall; four school houses, value \$45,000; one other public building, value \$1,500; in 1900 expended \$250 for sewers; \$725 for other permanent improvements; a total of \$975 for permanent public improvements; city indebtedness \$23,000; 50 per cent of public work done by city; 50 per cent by contract; average wages paid day laborers \$1.25; for man and team \$2.50. Has volunteer fire department consisting of 14 part time men, who receive \$25 per year; chief \$50; 17 calls were made on department in past year, of which four were false alarms; estimated value of property destroyed by fire \$4,000; saved \$14,000. Has city marshal, one deputy sheriff and four constables doing duty in the city; salary of marshal \$25 per year; has no city jail. Ray Hart, mayor; James Phetteplace, chief fire department; John Modell, marshal.

MONROE—Population, 5,043; has city hall, value \$5,000; four school houses, value \$40,000; four other public buildings, value \$21,000; in 1900 expended \$1,000 for parks; \$1,500 for sewers, and \$5,000 for other permanent improvements; a total of \$7,500 for permanent public improvements; city indebtedness \$35,000; 90 per cent of public work done by city; 10 per cent by contract; average wages paid day laborers \$1.25; for man and team \$3.00. Has volunteer fire department consisting of 35 part time men, who receive \$25 per year; chief \$50; 26 calls were made on department in past year; estimated value of property destroyed by fire \$11,000; saved \$35,000. Has city marshal, four regular men, three deputy sheriffs and two constables doing duty in the city; salary of marshal \$480; regular men \$1.33 per day; has city jail, in which no

prisoners were confined on the first day of May, 1900. F. C. Deinzer, mayor; Jacob Martin, chief fire department; Frank Lemerand, city marshal.

MOUNT CLEMENS—Population, 6,576; has city hall, value \$40,000; five school houses, value \$70,000; seven other public buildings, value \$8,000; in 1900 expended \$200 for parks; \$4,000 for paving; brick used in paving; \$3,500 for sewers; a total of \$7,700 for permanent public improvements; city indebtedness \$34,000; all public work done by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of two full time men and one company of 32 part time men; full time men receive \$45 per month; part time men \$400 for the company; chief \$75 per year; men are allowed off 14 days each year; 16 calls were made on department in past year, of which four were false alarms; estimated value of property destroyed by fire \$740; saved \$425,000. Has city marshal, one regular man, one deputy sheriff, three constables and two night-watchers doing duty in city; salary of marshal \$500; regular man \$1.33 per day; men are allowed off 14 days each year; has no city jail. R. C. Ullrich, mayor; H. C. Benton, city clerk; A. A. Ameel, chief fire department; Samuel Trew, marshal.

MT. PLEASANT—Population, 3,662; has city hall, value \$1,500; four school houses, value \$29,300; in 1900 expended \$10,000 for permanent public improvements; city indebtedness \$25,000; all public work done by city; average wages paid day laborers \$1.37; for man and team \$3.00. Has paid fire department consisting of one full time man and 16 part time men; full time man receives \$37.50 per month; part time men \$20 per year; chief \$30 per year; 18 calls were made on department in past year, of which six were false alarms; estimated value of property destroyed by fire \$2,800; saved \$5,000. Has city marshal, two deputy sheriffs, three constables and one night-watcher doing duty in city; salary of marshal \$100 per year; has no city jail. L. Shafer, mayor; F. H. Law, chief fire department; J. C. Warner, marshal.

MUSKEGON—Population, 20,818; has a city hall, value \$25,000; 23 school houses, value, \$399,450; one other public building, value \$128,500; in 1900 expended \$40,000 for paving; city indebtedness \$473,500; all public work done by city. average wages paid day laborers \$1.25; for man and team \$2.75. Has a paid fire department consisting of 13 full time men and 17 part time men; full time men receive \$642 per year; part time men \$180 per year; chief \$900 per year; 160 calls were made on department in past year of which three were false alarms; estimated value of property destroyed \$33,164; saved \$746,887. Has city marshal, seven regular men, two deputy sheriffs, two constables, one night-watcher and a police matron doing duty in city; salary of marshal \$900; regular men \$1.83 per day; matron paid for actual service; has a city jail in which one prisoner was confined on the first day of May, 1900. Frank Alberts, mayor; Napoleon Belfy, chief fire department; Daniel James, marshal.

NEGAUNEE—Population, 6,935; has a city hall, value \$34,000; five school houses, value \$60,000; two other public buildings, value \$9,000;

in 1900 expended \$5,000 for permanent public improvements; city indebtedness \$49,000; all public work done by city; average wages paid day laborers \$1.67; for man and team \$4.00. Has paid fire department consisting of one full time man who receives \$50 per month; and two volunteer companies; chief \$100 per year; man is allowed off three days each year; 20 calls were made on department in past year, three of which were false alarms; estimated value of property destroyed by fire \$5,205; saved \$43,150. Has a chief of police, four regular men, one deputy sheriff, three constables and four night-watchers doing duty in city; salary of chief \$780; regular men \$1.80 per day; has a city jail in which six prisoners were confined on the first day of May, 1900. P. B. Kirkwood, mayor; B. K. Weber, chief fire department; Thomas Gribble, chief of police.

NILES—Population, 4,287; has no city hall; six school houses, value \$51,000; two other public buildings, value \$2,000, in 1900 expended nothing for permanent public improvements; city indebtedness \$152,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.00. Has volunteer fire department composed of four companies, each company receives \$50 per year; salary of chief \$144 per year; nine calls were made on department in past year of which one was a false alarm; estimated value of property destroyed \$10,000; saved \$120,000. Has a city marshal, three regular men, one deputy sheriff, four constables and two night-watchers doing duty in the city; salary of marshal \$600; regular men \$1.66 per day; has a city jail in which no prisoners were confined on the first day of May, 1900. F. N. Bonine, mayor; William Baker, chief fire department; D. H. Toll, marshal.

NORTH MUSKEGON—Population, 518; has a city hall, value \$500; three school houses, value \$12,000; two other public buildings, value \$5,000; in 1900 expended nothing for permanent public improvements; city indebtedness \$13,000; all public work done by city; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department, the members of which are allowed \$1.25 per day for actual service; chief \$1.50; one call was made on department in past year; estimated value of property destroyed by fire \$200; saved \$100. Has a chief of police, and one deputy sheriff doing duty in city; salary of chief one dollar per year; has a city jail in which no prisoners were confined on the first day of May, 1900. C. E. Storrs, mayor; Iver Anderson, chief of police, who acts as chief of fire department.

NORWAY—Population, 4,170; has a city hall, value \$3,000; three school houses, value \$22,000; one other public building, value \$25,000; in 1900 expended \$4,500 for public buildings, \$3,000 for other permanent improvements; a total of \$7,500 for permanent public improvements; city indebtedness \$18,000; 25 per cent of public work done by city; 75 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of two full time men and 14 part time men; full time men receive \$600 per year; part time men \$30 per year and \$1 per hour actual service; chief \$770; men allowed off 24 days in year; 24 calls were made on department in past year, of which three were false alarms; estimated value of property destroyed by fire

\$3,000; no record kept of property saved. Has a city marshal, two regular men, one deputy sheriff, three constables and one night-watcher doing duty in city; salary of marshal \$660; regular men \$1.85 per day; men are allowed off seven days each year; has a city jail in which no prisoners were confined on the first day of May, 1900. L. F. Springer, mayor; D. W. Martin, chief fire department; Emil Eklund, marshal.

OWOSSO—Population, 8,696; has a city hall, value \$6,000; three school houses, value \$35,000; one other public building, value \$500; in 1900 expended \$60,000 for public buildings; \$2,000 for sewers; a total of \$62,000 for permanent public improvements; city indebtedness \$196,000; 10 per cent of public work done by city; 90 per cent by contract; average wages paid day laborers \$1.37; for man and team \$2.50. Has paid fire department consisting of two full time men who receive \$416 per year; and a volunteer company; salary of chief \$75; 42 calls were made on department in past year, of which 14 were false alarms; estimated value of property destroyed by fire \$4,215; saved \$48,700. Has city marshal, three regular men, two deputy sheriffs, three constables, and nine night-watchers doing duty in city; salary of marshal \$624; regular men \$1.72 per day; has a city jail in which were confined six prisoners on the first day of May, 1900. Morris Osburn, mayor; M. F. Blair, chief fire department; Z. H. Ross, marshal.

PETOSKEY—Population, 5,285; has no city hall; three school houses, value \$32,000; one other public building, value \$1,500; in 1900 expended \$1,600 for sewers; \$24,000 for other permanent improvements; a total of \$25,600 for permanent public improvements; city indebtedness \$100,000; 90 per cent of public work done by city; 10 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has volunteer fire department consisting of 21 men who receive \$3.00 per fire and \$1.00 for false alarms; 18 calls were made on department in past year, of which three were false alarms; estimated value of property destroyed by fire \$6,000; saved \$35,000. Has a city marshal, four regular men, one deputy sheriff, three constables and three night-watchers doing duty in city; salary of marshal \$540; regular men \$1.34 per day; has no city jail; P. B. Wachtel, mayor; C. H. McCarthy, chief fire department; J. J. Hitchings, marshal.

PONTIAC—Population, 9,769; has city hall, value \$10,000; seven school houses, value not reported; seven other public buildings, value \$145,000; in 1900 expended \$1,000 for parks; \$60,000 for paving; asphalt block used for paving; \$10,000 for sewers; \$10,000 for other permanent improvements; a total of \$81,000 for permanent public improvements; city indebtedness, \$122,000; 50 per cent of public work done by city; 50 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of two full time men, and 16 part time men; full time men receive \$500 per year; part time men \$65 per year; chief \$50; men are allowed off 40 days each year; 35 calls were made on department in past year; no record kept of property destroyed and saved. Has city marshal, two regular men and five constables; salary of marshal \$600; regular men \$2.00 per day; has no

city jail. Peter J. Meloy, Jr., mayor; G. H. Turk, chief fire department; Harvey J. Davis, marshal.

PORT HURON—Population, 19,158; has city hall, value \$50,000; 14 school houses, value \$120,000; 10 other public buildings, value \$60,000; in 1900 expended \$9,000 for parks; \$45,000 for paving; cedar blocks on concrete used in paving; \$2,500 for sewers; a total of \$56,500 for permanent public improvements; city indebtedness \$506,956; 10 per cent of public work done by city; 90 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.50. Has paid fire department consisting of five full time men and 18 part time men; full time men receive \$50 per month; part time men \$200 per year; chief \$800 per year; men are allowed off 10 days each year; 140 calls were made on department in past year, of which 12 were false alarms; no record kept of property destroyed or saved. Has chief of police, 15 regular men, four deputy sheriffs, 14 night-watchers and a police matron doing duty in city; salary of chief \$1,000; regular men \$1.86 per day; matron \$260 per year; men are allowed off 10 days per year; has no city jail. F. T. Moore, mayor; J. H. Beckton, chief fire department; Marshal N. Petit, chief of police.

SAGINAW—Population, 42,345; has city hall, value \$170,000; 26 school houses, value \$516,000; 18 other public buildings, value \$75,000; in 1900 expended \$1,000 for parks; \$52,000 for paving; brick, macadam and cedar blocks used in paving; \$15,000 for sewers; \$85,000 for other permanent improvements; a total of \$153,000 for permanent public improvements; city indebtedness \$1,347,780; 33 per cent of public work done by city; 67 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of 30 full time men and 13 part time men; full time men receive an average salary of \$636 per year; part time men \$360 per year each; chief \$1,400; men are allowed off 36 days; 292 calls were made on department in past year, of which 33 were false alarms; estimated value of property destroyed by fire \$170,296; saved \$566,682. Has a chief of police, 41 regular men, six deputy sheriffs, six constables and a police matron doing duty in city; salary of chief \$1,400 per year; regular men \$2.00 per day; matron \$300 per year; men are allowed off six days each year; has a city jail in which 15 prisoners were confined on the first day of May, 1900. William B. Baum, mayor; George W. Wallis, chief fire department; P. Kain, chief of police.

SAULT STE. MARIE—Population, 10,538; has city hall, value \$15,000; six school houses, value \$75,000; two other public buildings, value \$20,000; in 1900 expended \$20,000 for paving; macadam used in paving; \$10,000 for sewers; \$20,000 for other permanent improvements; a total of \$50,000 for permanent public improvements; city indebtedness \$372,000; all public work done by city; average wages paid day laborers \$1.75; for man and team \$3.50. Has paid fire department consisting of three full time men and 20 part time men; full time men receive \$55 per month; part time men \$1.50 per fire; chief \$840 per year; men are allowed off 14 days; 56 calls were made on department in past year, of which four were false alarms; estimated value of property de-

stroyed by fire \$28,601; saved \$118,150. Has chief of police, six regular men, two deputy sheriffs, four constables and five night-watchers doing duty in city; salary of chief \$800; regular men \$1.83 per day; seven days are allowed off each year; has a city jail in which two prisoners were confined on the first day of May, 1900. P. C. Keliher, mayor; G. F. Van Wyck, chief fire department; N. A. Burdick, chief of police.

ST. CLAIR—Population, 2,543; has city hall, value \$5,000; four school houses, value \$20,000; in 1900 expended \$750 for parks; \$6,000 for repairs in paving; \$1,500 for sewers; \$3,750 for other permanent improvements; a total of \$12,000 for permanent public improvements; city indebtedness \$50,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.00. Has volunteer fire department consisting of 40 men, who receive \$100 per year; chief receives no salary; seven calls were made on department in past year, of which one was a false alarm; estimated value of property destroyed by fire \$2,800; saved \$2,000. Has city marshal, one deputy sheriff, two constables and one night-watcher doing duty in city; salary of marshal \$480; has a city jail in which no prisoners were confined on the first day of May, 1900. J. W. Inches, mayor; Bruno Streit, chief fire department; P. R. Roberts, marshal.

ST. IGNACE—Population, 2,271; has city hall, value \$3,000; three school houses, value \$17,000; in 1900 expended \$400 for parks; \$300 for sewers; \$2,300 for other permanent improvements; a total of \$3,000 for permanent public improvements; city indebtedness \$40,000; all public work done by city; average wages paid day laborers \$1.50; for man and team \$4.00. Has volunteer fire department consisting of 18 men who receive \$2.00 per fire; chief receives no salary; 11 calls were made on department in past year, of which two were false alarms; estimated value of property destroyed by fire \$2,500; saved \$12,900. Has city marshal, one regular man, one deputy sheriff, two constables and one night-watcher doing duty in city; salary of marshal \$600; regular man \$1.66 per day; has a city jail in which no prisoners were confined on the first day of May, 1900. Eli Brizette, mayor; Joseph Therrien, chief fire department and marshal.

ST. JOSEPH—Population, 5,155; has city hall, value \$3,000; three school houses, value \$80,000; two other public buildings, value \$1,000; in 1900 expended \$350 for parks; \$1,250 for repairs in paving; a total of \$1,600 for permanent public improvements; city indebtedness \$128,500; 75 per cent of public work done by city; 25 per cent by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of four full time men and 20 part time men; full time men receive \$40 per month; part time men are paid for actual service and receive \$1.50 for first hour and 50 cents thereafter, and \$1.00 for false alarms; chief \$50; 19 calls were made on department in past year, of which four were false alarms; no record kept of property destroyed and saved. Has chief of police, five regular men, two deputy sheriffs, four constables and three night-watchers doing duty in city; salary of chief \$600; regular men \$1.33 per day; has a city jail in which one prisoner was confined on the first day of May, 1900.

Nelson B. Rich, mayor; Harry G. Hughson, chief fire department; Louis Hosbein, chief of police.

ST. LOUIS—Population, 1,989; has a city hall, value \$5,000; two school houses, value not given; four other public buildings, value \$4,000; in 1900 expended \$200 for parks; \$1,000 for sewers; \$3,000 for other permanent improvements; a total of \$4,200 for permanent public improvements; city indebtedness \$19,000; all public work done by city; average wages paid day laborers \$1.25; for man and team \$2.50. Has volunteer fire department consisting of 15 men who receive \$150 per year; chief \$50 per year; 28 calls were made on department in past year of which 10 were false alarms; estimated value of property destroyed \$2,300; saved \$3,200. Has city marshal, two regular men, one deputy sheriff, four constables and one night-watcher doing duty in city; salary of marshal \$360; regular men \$1.00 per day; has a city jail in which no prisoners were confined on the first day of May, 1900. H. J. Tuger, mayor; A. H. Lowry, chief fire department; Charles Morrow, marshal.

STANTON—Population, 1,234; has city hall, value \$1,000; two other public buildings, value \$1,000; in 1900 expended nothing for permanent public improvements; city indebtedness \$9,000; all public work done by city; average wages paid day laborers \$1.25; for man and team \$2.00. Has volunteer fire department consisting of 16 men who receive \$1.00 per fire; chief \$25 per year; five calls were made on department in past year of which two were false alarms; estimated value of property destroyed \$1,500; saved \$500. Has a city marshal, one deputy sheriff, three constables and one night-watcher doing duty in city; marshal receives no salary; has a city jail in which no prisoners were confined on the first day of May, 1900. F. A. Miller, mayor; L. C. Halstead, chief fire department; W. R. Beardsley, marshal.

STURGIS—Population, 2,465; has city hall, value \$1,500; two school houses, value \$5,500; in 1900 expended \$1,000 for permanent public improvements; city indebtedness \$40,000; all public work done by city; average wages paid day laborers \$1.25; for man and team \$2.50. Has chief of police, one deputy sheriff, three constables and one night-watcher doing duty in city; salary of chief \$400; has a city jail in which no prisoners were confined on the first day of May, 1900. S. R. Robinson, acting mayor; Fred Unterkircher, chief fire department; John C. Bennett, chief of police.

TAWAS CITY—Population, 1,228; has city hall, value \$3,000; three school houses, value \$7,000; in 1900 expended \$600 for repairs in paving; city indebtedness \$4,500; 90 per cent of public work done by city; 10 per cent by contract; average wages paid day laborers \$1.25; for man and team \$2.50. Has volunteer fire department; chief receives no salary; four calls were made on department in past year of which two were false alarms; estimated value of property destroyed by fire \$3,000; saved, no record kept. Has city marshal, one deputy sheriff and three constables doing duty in city; salary of marshal \$365; has no city jail.

William Nisbet, mayor; Wilfred Grise, chief fire department; A. McRae, marshal.

THREE RIVERS—Population, 3,550; has no city hall; four school houses, value \$48,000; in 1900 expended \$500 for sewers; \$2,500 for other permanent improvements; a total of \$3,000 for permanent public improvements; city indebtedness \$9,200; all public work done by city; average wages paid day laborers \$1.50; for man and team \$2.75. Has volunteer fire department who receive 75 cents for first hour, 50 cents for each hour thereafter, actual service; chief \$25 per year; five calls were made on department in past year; estimated value of property destroyed \$5,000; saved \$75,000. Has chief of police, two regular men, one deputy sheriff, four constables and two night-watchers doing duty in city; salary of chief \$500; regular men \$1.17 per day; has a city jail in which no prisoners were confined on the first day of May, 1900. W. W. French, mayor; W. H. Gay, chief fire department; A. Hahn, chief of police.

TRAVERSE CITY—Population, 9,407; has no city hall; seven school houses, value \$135,000; three other public buildings, value \$10,000; in 1900 expended \$500 for parks; \$1,000 for sewers; a total of \$1,500 for permanent public improvements; city indebtedness \$90,167; all public work done by city; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of four full time men and 60 part time men; full time men receive \$50 per month; part time men \$1.00 per fire; chief \$600 per year; five days allowed off each year; 28 calls were made on department in past year, of which one was a false alarm; estimated value of property destroyed \$23,300; saved \$240,000. Has chief of police, one regular man, two deputy sheriffs, four constables and two night-watchers doing duty in city; salary of chief \$600; regular man \$1.65 per day; has a city jail in which no prisoners were confined on the first day of May, 1900. A. W. Rickerd, mayor; John Rennie, chief fire department and chief of police.

WEST BAY CITY—Population, 13,119; has no city hall; seven school houses, value \$150,000; five other public buildings, value \$31,000; in 1900 expended \$3,700 for public buildings; \$28,890 for paving; brick on concrete used for paving; \$10,000 for sewers; \$117,410 for other permanent improvements; a total of \$160,000 for permanent public improvements; city indebtedness \$431,000; all public work done by contract; average wages paid day laborers \$1.50; for man and team \$3.00. Has paid fire department consisting of four full time men, and 12 part time men; full time men receive \$45 per month; part time men \$12.50 per month; chief \$800; men are allowed off 12 days per year; 98 calls were made on department in past year; of which seven were false alarms; estimated value of property destroyed by fire \$21,690; saved not reported. Has chief of police, five regular men, one deputy sheriff, two constables, three night-watchers and a police matron doing duty in city; salary of chief \$1,000; regular men \$1.67; matron \$12 per year; seven days allowed off each year; has a city jail in which no prisoners were confined on the first day of May, 1900. Peter Lind, mayor; Godfrey Kulbach, chief fire department; George V. Davis, chief of police.

WYANDOTTE—Population, 5,183; has a city hall, value \$10,000; three school houses, value \$40,000; one other public building, value \$40,000; in 1900 expended nothing for permanent public improvements; city indebtedness \$86,000; all public work done by city; average wages paid day laborers \$1.25; for man and team \$3.00. Has paid fire department consisting of three full time men and 12 part time men; full time men receive \$45 per month; part time men \$40 per year; chief \$50 per year; men are allowed off 14 days each year; 21 calls were made on department in past year of which nine were false alarms; estimated value of property destroyed \$3,000; saved \$10,000. Has city marshal, three deputy sheriffs, three constables and one night-watcher doing duty in city; salary of marshal \$500; has a city jail in which no prisoners were confined on the first day of May, 1900. Henry Roehrig, mayor; G. A. Baumler, chief fire department; John Melody, city marshal.

YPSILANTI—Population, 7,378; has city hall, value \$3,000; four school houses, value \$50,000; three other public buildings, value \$35,000; in 1900 expended \$500 for parks; \$12,000 for paving; brick used for paving; \$6,000 for sewers; \$4,000 for other permanent improvements; total of \$22,500 for permanent public improvements; city indebtedness \$150,000; 50 per cent public work done by city; 50 per cent by contract; average wages paid day laborers \$1.25; for man and team \$3.00. Has paid fire department consisting of six full time men who receive \$460 per year; chief \$100; men are allowed off 30 days each year; 73 calls were made on department in past year of which 26 were false alarms; estimated value of property destroyed \$3,380; saved \$120,000. Has city marshal, three regular men, five deputy sheriffs, two constables and two night-watchers doing duty in city; salary of marshal \$600; regular men \$1.35; has a city jail in which no prisoners were confined on the first day of May, 1900. H. R. Scoville, mayor; W. W. Worden, chief fire department; C. M. Warner, marshal.

DEDUCTIONS FROM THE FOREGOING STATISTICS OF CITIES.

Number of chartered cities in the State.....	78
Number cities that own city hall.....	55
Number that do not own city hall.....	23
Aggregate value of city halls.....	\$3,482,834 00
Average value of each city hall.....	63,324 25
Number cities owning school houses.....	76
Number cities not owning school houses.....	2
Total number of school houses reported.....	500
Average number for each city.....	6.5
Aggregate value of school houses, as given.....	\$8,956,080 00
Average value for each city.....	117,843 16
Average value of each school house.....	17,912 16
Number cities owning other public buildings.....	56
Number cities not owning other public buildings.....	22
Number of other public buildings owned.....	256
Average number owned by each city.....	4.6
Aggregate value of the 256 buildings.....	\$5,295,590 00
Average value for each city.....	94,564 11
Average value of each building.....	20,685 90

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Number cities expending money on public buildings in 1900.....	14
Number cities expending no money on public buildings.....	64
Aggregate amount expended	\$536,865 00
Average for each city.....	38,347 50
Number cities expending money on parks in 1900.....	27
Number cities expending no money on parks in 1900.....	51
Aggregate amount expended	\$139,155 00
Average for each city.....	5,153 90
Number cities expending money for paving in 1900.....	31
Number cities expending no money for paving in 1900.....	47
Aggregate amount expended.....	\$942,115 00
Average for each city.....	30,390 81
Number cities putting down new paving.....	21
(They are using material in the order named: Brick, cedar, asphalt, macadam, and stone.)	
Number cities expending money for sewers in 1900.....	43
Number cities expending no money for sewers in 1900.....	35
Aggregate amount expended.....	\$363,755 00
Average for each city.....	8,459 40
Number cities expending money for other improvements in 1900.....	49
Number cities expending no money for other improvements.....	29
Aggregate amount expended for other improvements.....	\$541,510 00
Average for each city.....	11,051 22
Number cities expending money in 1900 for permanent public improvements....	66
Number cities expending no money for permanent public improvements in 1900....	12
Aggregate amount expended by the 66 cities.....	\$2,523,400 00
Average amount for each city.....	38,233 33
Number cities having public indebtedness.....	76
Number cities having no public indebtedness.....	2
Aggregate amount of public indebtedness.....	\$15,304,864 00
Average for each city.....	201,379 80
Number cities where all public work is done by city.....	39
Number cities where all public work is done by contract.....	3
Average amount of work done by cities, 73 per cent.	
Average amount of work done by contract, 27 per cent.	
Average daily wages paid day laborers.....	\$1 43
Average daily wages paid for team and driver.....	3 06
Number cities having paid fire departments.....	44
Number cities not having paid fire departments.....	34
Number cities paying chief a salary.....	62
Aggregate salaries paid chiefs.....	\$26,690 00
Average salary for each chief.....	430 50
Number cities having full time men.....	44
Number of full time men.....	794
Average number for each city.....	18
Aggregate yearly wages paid full time men.....	\$637,066 00
Average for each man.....	802 35
Average number days full time men allowed off yearly.....	23
Number cities having part time men.....	65
Number of part time men employed.....	1,592
Average number for each city.....	24.5

Number part time men paid per fire.....	607
Number part time men paid per hour.....	188
Number paid monthly or yearly.....	797
Total number part time men.....	1,592
Whole number runs made in 12 months.....	4,474
Average number runs for each city.....	57.3
Number that were false alarms.....	418
Average number false alarms for each city.....	6.6
Estimated value of property destroyed.....	\$2,217,098 00
Average amount for each city.....	32,132 00
Estimated value of property saved.....	12,713,600 00
Average amount for each city.....	208,420 00
Number cities whose chief police officer is called "Marshal".....	54
Number where such officer is designated "Chief of Police".....	24
Number that pay the chief police officer a salary.....	76
Number that pay no salary to the chief police officer.....	2
Aggregate salaries paid chief police officers.....	\$50,837 00
Average salary for each.....	668 90
Number cities having regular men on police force.....	56
Number having no regular men, beside marshal, on police force.....	22
Aggregate of regular men (including Detroit).....	898
Average for each city (including Detroit).....	16
Average daily wages paid (including Detroit).....	\$2 98
Number regular men (not including Detroit).....	385
Average for each city (not including Detroit).....	7
Average daily wages paid (not including Detroit).....	\$1 88
Average number regular men on force in Detroit.....	513
Average daily wages paid force per day in Detroit.....	\$3 83
Number cities having deputy sheriffs actively serving.....	74
Number cities having no deputy sheriffs.....	4
Number deputy sheriffs actively serving.....	148
Average for each city.....	2
Number cities having constables actively serving.....	72
Number cities having no constables.....	6
Number of constables actively serving.....	162
Average for each city.....	2.1
Number cities having nightwatchers with police powers.....	60
Number cities having no nightwatchers with police powers.....	18
Number said nightwatchers.....	186
Average for each city.....	3.1
Average number days men allowed off each year.....	8.7
Number cities having police matrons.....	12
Number cities having no police matrons.....	66
Whole number of police matrons.....	18
Average for each city.....	1.5
Average yearly salaries of police matrons.....	\$407 13
Number cities having city prisons.....	53
Number cities having no city prisons.....	25
Number having prisoners on the first day of May, 1900.....	16
Number of prisoners on the first day of May, 1900.....	69
Average number for each.....	4.3

Number that were males, 61; or 88 per cent.
Number that were females, 8; or 12 per cent.
Number that were native born, 40; or 60 per cent.
Number that were foreign born, 20, or 40 per cent.

Number charged with larceny.....	3
Number charged with burglary.....	4
Number charged with assault and battery.....	6
Number charged with being disorderly.....	12
Number charged with being tramps.....	14
Number charged with being drunk.....	15
Number charged with other offenses.....	15
Whole number confined.....	69

INCORPORATED VILLAGES
PUBLIC IMPROVEMENT, INDEBTEDNESS
AND
BUSINESS PROSPECTS

ALSO REPORTS FROM
FIRE AND POLICE DEPARTMENTS

STATISTICS OF INCORPORATED VILLAGES.

ADDISON—Population, 470; has no village hall; in 1900 expended \$700 for public improvements; village indebtedness \$525; has one police officer; entire expense of police force, 1899, \$15; general business in the village is not as good as in 1899; average wages paid day laborers \$1.25; for man and team \$2.50; has no idle men unable to obtain work. Has a volunteer fire department; chief, Frank M. Smith; salary \$10 per year; has a chemical engine; value of property belonging to the department \$600. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has a village lockup, in which no prisoners were confined on the first day of May, 1900. L. S. Darling, president; J. D. Sanders, clerk; John Terpening, marshal.

ALGONAC—Population, 1,216; has no village hall; in 1900 expended \$20,000 for public improvements; village indebtedness \$1,600; has two police officers, including marshal; entire expense of police force, 1899, \$500; general business in the village is better than in 1899; average wages paid day laborers \$1.50; for man and team \$3.00; has no idle men unable to obtain work. Has no organized fire department; has a hand engine; value of property belonging to the department \$500. Has a village marshal who receives statutory fees; has one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. J. M. Robertson, president; W. F. Chapman, marshal; R. T. Gilbert, clerk.

ALLEGAN—Population, 2,667; has a village hall, value \$8,000; in 1900 expended \$5,000 for public improvements; has no village indebtedness; has two police officers, including marshal; entire cost of police force, 1899, \$900; general business in the village is the same as in 1899; average wages paid day laborers \$1.50; for man and team \$2.75; has no idle men unable to obtain work. Has a volunteer fire department, consisting of 75 men, who are divided into three companies; each company receives \$75 per year; chief, Charles Ingraham, who receives no salary; has no fire engine; value of property owned by the department \$2,000. Has a village marshal, who receives a yearly salary of \$450 and statutory fees; has four deputy sheriffs and four constables actively serving in the village; has one night-watch with police power; has no village lockup. John H. Krumbein, president; W. F. Dorgan, clerk; Lewis Chronister, marshal.

ALMONT—Population, 718; has a village hall, value \$4,000; in 1900 expended \$800 for public improvements; has no village indebtedness; has one police officer; entire expense of police force, 1899, \$50; general business in the village is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 30 men, who receive 25 cents per month for practice; chief, R. E. Lee, who receives no salary; has a hand engine; value of property belonging to the department \$2,000. Has a village marshal, who receives a salary of \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. C. G. McEntee, president; A. H. Patterson, clerk; George O. Hough, marshal.

ALMA—Population, 2,047; has a village hall, value \$2,000; in 1900 expended \$2,000 for public improvements; village indebtedness \$10,000; has two police officers, including marshal; entire expense of police force, 1899, \$600; general business in the village is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.50. Has a volunteer fire department, consisting of 30 men, who receive 15 cents per hour for actual service; chief, Charles Fishbeck, salary 20 cents per hour; has no fire engine; value of property belonging to the department \$1,500. Has a village marshal who receives a salary of \$200 and statutory fees; has one regular man who receives \$360 per year and two constables actively serving in the village; has one night-watch with police power; has a village lockup, in which no prisoners were confined on the first day of May, 1900. Ely Brewbaker, president; W. W. Kinch, clerk; John Greig, marshal.

ARMADA—Population, 863; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$400; has one police officer; entire expense of police force, 1899, \$50; general business in the village is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department; has a hand engine; value of property belonging to the department \$300; has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. W. A. Dudley, president; E. W. Sutton, clerk; S. W. Hoover, marshal.

ASHLEY—Population, 617; has a village hall, value \$200; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; general business in the village is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.12; for man and team \$2.00. Has no organized fire department; has a hand engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$25 per year and statutory fees; has a village jail, in which no prisoners were confined on the first day

of May, 1900. Z. V. Payne, president; E. Z. Fuller, clerk; Charles H. Gunn, marshal.

ATHENS—Population, 583; has no village hall; in 1900 expended \$600 for public improvements; has no village indebtedness; has two police officers, including marshal; expense of police force in 1899 not given; general business in the village is the same as in 1899; has no idle men unable to obtain work; average wages of day laborers \$1.25; for man and team \$2.00. Has a volunteer fire department, consisting of 25 men; they receive no pay; chief, R. A. Carpenter, who receives no salary; has both hand and chemical engines; value of property belonging to the department \$1,200. Has a village marshal who receives statutory fees; one regular man, one deputy sheriff, and one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. R. P. Wisner, president; E. D. Albertson, clerk.

ATLANTA AND ATTICA—Have no village organizations.

AUGUSTA—Population, 541; has a village hall, value \$1,000; in 1900 expended \$1,200 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$225. General business in the village better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department consisting of 50 men, who receive 25 cents an hour for actual service; chief, S. W. Bailey, who receives no salary; has a hand engine; value of property belonging to the department \$900. Has a village marshal who receives statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Edward Beadle, president; V. G. Burdick, clerk; William H. Dole, marshal.

BAD AXE—Population 1,241; has a village hall, value \$2,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$23,850; has two police officers including marshal; entire expense of police force in 1899, \$175; general business in the village is better than in 1899; has no idle men unable to obtain work; average wages of day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 35 men, who receive no pay; chief, Joseph Fremont, who receives no salary; has no engines; value of property belonging to the department \$1,000. Has a village marshal, who receives \$250 per year and statutory fees; has one regular man, one deputy sheriff and one constable actively serving in the village; has no village lockup. Richard Wolston, president; J. H. White, clerk; William Younglove, marshal.

BALDWIN—Population, 343; has a village hall, value \$500; in 1900 expended \$200 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$10; general business in the village the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department; has a hand engine; value of

property belonging to the department \$200. Has a village marshal who receives a salary of \$10 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has no village lockup. E. C. Herendeen, president; A. W. Gunn, clerk; John Bradford, marshal.

BANCROFT—Population, 528; has a village hall, value \$1,500; in 1900 expended \$1,500 for public improvements; village indebtedness \$2,000; has one police officer; entire expense of police force in 1899, \$400; general business is better than in 1899. Has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.50. Has a volunteer fire department consisting of 20 men, who receive no pay; chief, E. B. Sherman; has a chemical engine; value of property belonging to the department \$1,500. Has a village marshal who receives a salary of \$15 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. E. Godfrey, president; Edward Lawrence, clerk; C. A. Odell, marshal.

BANGOR—Population, 1,021; has a village hall, value \$2,000; in 1900 expended nothing for public improvements; has one police officer; entire expense police force in 1899, \$300; general business in the village same as in 1899; has no idle men who are unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.25. Has no organized fire department; has a hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives a salary of \$300 and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. R. C. Nyman, president; M. C. McKee, clerk; A. J. Fausnaugh, marshal.

BARAGA—Population, 1,185; has no village hall; in 1900 expended \$5,000 for public improvements; village indebtedness \$1,100; has one police officer; entire expense of police force in 1899, \$600; general business in the village is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$2.00; for man and team \$5.00. Has a volunteer fire department, consisting of 25 men who receive no pay; chief, A. Girard, who receives no salary; has no engine; value of property belonging to the department \$2,000. Has a village marshal who receives \$50 and statutory fees; has two deputy sheriffs actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. James J. Byeer, president; James McMahan, clerk; John Cosgrove, marshal.

BEAR LAKE—Population, 448; has no village hall; in 1900 expended \$200 for public improvements; village indebtedness \$50; has one police officer; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department; value of property belonging to the department not given. Has a village marshal who receives

statutory fees; has one constable actively serving in the village; has a village lockup in which one prisoner was confined on the first day of May, 1900. Arlie L. Hopkins, president; L. D. Shirtliff, clerk; Clark Griffin, marshal.

BELLAIRE—Population, 1,157; has no village hall; in 1900 expended \$2,700 for public improvements; village indebtedness \$6,000; has two police officers including marshal; entire expense of police force in 1899, \$150; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.25. Has a volunteer fire department consisting of 24 men who receive \$5.00 per year each; chief, H. L. Brady, salary \$5.00 per year; has no engine; value of property belonging to the department \$700. Has a village marshal who receives \$50 per year and statutory fees; has one regular man, one deputy sheriff and two constables actively serving in the village; has no village lockup. W. M. Davenport, president; C. V. Hinman, clerk; Samuel Crampton, marshal.

BELLEVUE—Population, 1,074; has a village hall, value \$800; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has two police officers including marshal; entire expense of police force in 1899, \$600; general business is the same as in 1899; has no idle men who are unable to obtain work; average wages paid day laborers \$1.37; for man and team \$2.50. Has no organized fire department; has a hand engine; value of property belonging to the department \$300. Has a village marshal who receives \$365 per year and statutory fees; has one regular man, one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. William Huggett, president; G. E. Fitzgerald, clerk; J. A. Owen, marshal.

BENZONIA—Population, 484; has no village hall; has no village indebtedness; in 1900 expended nothing for public improvements; has one police officer; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department, and no fire apparatus. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. C. E. Carr, president; E. A. Gilbert, clerk; G. C. Jones, marshal.

BERRIEN SPRINGS—Population, 808; has no village hall; in 1900 expended \$1,500 for public improvements; village indebtedness \$10,000; has two police officers including marshal; entire expense of police force in 1899, \$200; general business in the village is better than in 1899; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of one company of 40 men, who receive \$50 per year which is divided amongst the men; chief, Lee Murphy, who receives no salary; has a hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives statutory fees; has one deputy sheriff and two constables actively serv-

ing in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. B. Ayers, president; C. D. Nichols, clerk; M. J. Cassady, marshal.

BIRMINGHAM—Population, 1,170; has no village hall; in 1900 expended \$2,000 for public improvements; village indebtedness \$4,000; has one police officer; entire expense of police force in 1899, \$150; general business in the village is the same as in 1899; has some idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire engine; value of property belonging to the department \$500. Has a village marshal who receives a salary of \$50 per year and statutory fees; has one deputy sheriff actively serving in the village; has no village lockup. M. N. Leonard, president; T. H. Cobb, clerk; C. E. Mudge, marshal.

BLISSFIELD—Population, 1,268; has a village hall, value \$2,750; in 1900 expended nothing for public improvements; village indebtedness \$13,500; has one police officer; entire expense of police force in 1899 \$400; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.37; for man and team \$3.00. Has a volunteer fire department consisting of 30 men who receive \$5.00 per year each; chief, M. Swift, salary \$5.00 per year; has steam engine; value of property belonging to the department \$5,000. Has a village marshal who receives \$75 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. D. Ellis, president; L. H. Young, clerk; H. I. Shaw, marshal.

BLOOMINGDALE—Population, 379; has a village hall, value \$1,000; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense police force, 1899, \$25; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 35 men who receive no pay; chief, William Ruess, who has no salary; has hand engine; value of property belonging to the department not given. Has a village marshal who receives \$30 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. David Joy, president; R. D. Perkins, clerk; John Saunders, marshal.

BOARDMAN—Population, 298; has a village hall, value \$400; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police officer; general business in the village is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$20 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were

confined on the first day of May, 1900. F. A. Wellman, president; Bert Shuert, clerk; J. E. McCoslin, marshal.

BOYNE CITY—Population, 912; has a village hall, value \$3,000; in 1900 expended \$2,500 for public improvements; village indebtedness \$10,000; has three police officers including marshal; entire expense of police force in 1899, \$400; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.50. Has a volunteer fire department consisting of 28 men who receive \$1.00 per fire; chief, J. H. Cooper, who receives no salary; has hand and chemical engines; value of property belonging to the department, \$1,600. Has a village marshal who receives statutory fees, and two other police officers; one deputy sheriff and three constables, actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Alfred DeLacy, president; E. A. Ruegsegger, clerk; Albert Jubenville, marshal.

BOYNE FALLS—Population, 431; has no village hall; in 1900 expended \$800 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$125; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.35; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$96 per year and statutory fees; has two deputy sheriffs and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. L. Pierce, president; M. L. Magee, clerk; James P. Austin, marshal.

BREEDSVILLE—Population, 236; has no village hall; in 1900 expended \$300 for public improvements; has no village indebtedness; has two police officers, including marshal; entire expense of police force in 1899, \$35; general business is the same as in 1899; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives a salary of \$10 per year and statutory fees; also one other police officer and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. G. A. Hawley, president; L. D. Townsend, clerk; S. A. Smith, marshal.

BRIGHTON—Population, 781; has a village hall, value \$2,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$356; has one police officer; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 38 men who receive no pay; chief, George L. Pitkin, who receives no salary; has a hand engine; value of property belonging to the department \$3,000. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no pris-

oners were confined on the first day of May, 1900. G. B. Ratz, president; E. W. Town, clerk; H. B. Rose, marshal.

BRITTON—Population, 345; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. L. A. Babcock, president; G. L. Gripton, clerk; Walter L. Exelby, marshal.

BRONSON—Population, 1,176; has a village hall, value \$2,000; in 1900 expended \$600 for public improvements; has no village indebtedness; has three police officers, including marshal; entire expense of police force in 1899, \$200; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 31 men, who receive no pay; chief, J. S. Davis, no salary; has a hand engine; value of property belonging to the department \$500. Has a village marshal who receives \$240 per year and statutory fees; also two other police officers, one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. M. VanEvery, Jr., president; Milo Thompson, clerk; A. E. Butler, marshal.

BROOKLYN—Population, 494; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$100; has one police officer; entire expense of police force, 1899, \$50; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department; number of men not given; C. T. Green, chief; company receives no pay; has a chemical engine; value of property belonging to the department \$600. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. John B. Martin, president; David Walker, clerk; Harvey Mott, marshal.

BROWN CITY—Population, 603; has a village hall, value \$800; in 1900 expended \$500 for public improvements; village indebtedness \$1,500; has no police officer; entire expense of police force, 1899, \$10; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department; number of men not given; they receive no pay; W. A. Martin, chief; has a hand engine; value of property belonging to the department \$1,000. Has no village marshal; has one deputy sheriff and one constable actively serving in the village; has a

village lockup in which no prisoners were confined on the first day of May, 1900. Joseph Regan, president; W. H. Bonfoy, clerk.

BUCHANAN—Population, 1,708; has no village hall; in 1900 expended nothing for public improvements; village indebtedness \$5,400; has five police officers, including marshal; entire expense of police force in 1899, \$300; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 30 men who receive 50 cents per month each; chief, M. F. Kingery, salary \$25 per year; has hand and steam engines; value of property belonging to the department \$3,000. Has a village marshal who receives \$180 per year and statutory fees; also four other police officers, one deputy sheriff and three constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. S. Mead, president; W. F. Runner, clerk; George Bradley, marshal.

BURLINGTON—Population, 334; has a city hall, value \$200; in 1900 expended \$100 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$15; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.50. Has no organized fire department and no fire engine; value of property belonging to the department \$60. Has a village marshal who receives statutory fees; has one constable actively serving in village; has no village lockup. J. L. Morgan, president; R. M. Rogers, clerk; Edson Treadwell, marshal.

BURR OAK—Population, 744; has a village hall, value \$1,000; in 1900 expended \$1,200 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$300; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has a volunteer fire department consisting of 40 men who receive no pay; chief, Carl Froh, who receives no salary; has a hand engine; value of property belonging to the department \$800. Has a village marshal who receives statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. A. Boyer, president; A. C. Burns, clerk; C. A. Hackman, marshal.

BYRON—Population, 432; has no village hall; in 1900 expended \$650 for public improvements; village indebtedness \$100; has one police officer; entire expense of police force in 1899, \$25; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff and four constables actively serving in the village; has a lockup in

which no prisoners were confined on the first day of May, 1900. F. D. Stowell, president; E. L. Haviland, clerk; John Avalas, marshal.

CALEDONIA—Population, 427; has a village hall, value \$200; in 1900 expended \$800 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$10; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department; number of men not given, who receive no pay; chief, Henry Snider, salary \$1.50 per day for actual service; has a chemical engine; value of property belonging to the department \$700. Has a village marshal who receives statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. H. Kinsey, president; W. E. Kinsey, clerk; G. W. Barbour, marshal.

CAPAC—Population, 547; has no village hall; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force, 1899, \$125; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has hand engine; value of property belonging to the department \$500. Has a village marshal, salary \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. P. Morrison, Jr., president; A. S. McEntee, clerk; James Whealy, marshal.

CARO—Population, 2,006; has a city hall, value \$6,000; in 1900 expended \$7,000 for public improvements; village indebtedness \$2,000; has seven police officers, including marshal; entire expense of police force, 1899, \$1,000; has no idle men unable to obtain work; general business is the same as in 1899; average wages paid day laborers \$1.50; for man and team \$2.50. Has a volunteer fire department, consisting of a company of 21 men; the company receives \$300 per year; chief, F. O. Riddle; has no engine; value of property belonging to the department \$2,500. Has a village marshal who receives \$200 per year and statutory fees; has two deputy sheriffs and four constables actively serving in the village; has one night-watch with police power; has no village lockup. F. D. Riddle, president; G. D. Wood, clerk; James P. Westfall, marshal.

CARROLLTON—Has no village organization.

CARSON CITY—Population, 906; has a village hall, value \$1,200; in 1900 expended \$900 for public improvements; village indebtedness \$7,500; has two police officers including marshal; entire expense of police force, 1899, \$154; general business is not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 24 men who are paid for actual service; chief, H. G. Heaton; has no fire engine;

value property belonging to the department \$1,000. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village, has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. T. T. Dixon, president; A. B. Goodwin, clerk; George R. Gibbs, marshal.

CARSONVILLE—Population, 400; has no village hall; in 1900 expended \$2,000 for public improvements; village indebtedness \$250; has one police officer; entire expense of police force, 1889, \$100; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department; number of men not given; they receive no pay; chief, W. E. Aley, salary \$25 per year; has a chemical engine; value of property belonging to the department \$600. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. John Wilson, president; A. W. Graham, clerk; George Hartshorn, marshal.

CASEVILLE—Population, 507; has no village hall; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police officer; entire expense of police force, 1899, \$20; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department; and no fire apparatus. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has no village lockup. T. R. Woodworth, president; Robert McKinley, clerk; Robert McKinley, marshal.

CASNOVIA—Population, 277; has a village hall, value \$250; in 1900 expended \$250 for public improvements; village indebtedness \$100; has one police officer; entire expense of police force, 1899, \$10; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department; has a hand engine; value of property belonging to the department \$300. Has a village marshal who receives statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. D. G. Bell, president; F. R. Hayward, clerk; Frank H. Palen, marshal.

CASS CITY—Population, 1,113; has a village hall, value \$5,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$18,000; has one police officer; entire expense of police force, 1899, \$300; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.75; for man and team \$3.00. Has a volunteer fire department consisting of one company of 23 men, company is paid \$100 per year; chief, W. I. Frost, who receives no salary; has a hand engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$400 per year and statutory

fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Charles M. Heller, president; W. H. Hebblewhite, clerk; James Ramsey, marshal.

CASSOPOLIS—Population, 1,330; has a village hall, value \$2,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$7,000; has one police officer; entire expense of police force, 1899, \$500; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department consisting of 30 men; men and chief receive \$2.00 per fire each; chief, D. F. McIntosh; has no engine; value of property belonging to the department \$800. Has a village marshal who receives \$440 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has no village lockup. G. M. Kingsbury, president; Eber Reynolds, clerk; D. F. McIntosh, marshal.

CEDAR SPRINGS—Population, 950; has a village hall, value \$1,000; in 1900 expended \$4,000 for public improvements; village indebtedness \$6,000; has one police officer; entire expense of police force in 1899, \$65; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has a volunteer fire department consisting of a company of 15 men; the company receives \$15 per year and 50 cents per fire each; chief, John Beucus; has no fire engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$60 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. G. W. Sharer, president; F. L. Williams, clerk; D. E. Mench, marshal.

CENTRAL LAKE—Population, 1,307; has no village hall; in 1900 expended \$700 for public improvements; village indebtedness \$900; has one police officer; entire expense of police force in 1899, \$500; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$50 per year and statutory fees; has two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. T. W. Rushton, president; J. B. Gerome, clerk; O. Reynolds, marshal.

CENTREVILLE—Population, 645; has a village hall, value \$1,000; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$100; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 25 men, who receive pay for actual service; chief, W. H. Redfield; has no fire engine; value of property belonging to the department \$700. Has a village mar-

shal who receives \$60 per year and statutory fees; has two deputy sheriffs actively serving in the village; has no village lockup. S. R. Butler, president; Charles Johnson, clerk; Peleg Cady, marshal.

CHARLEVOIX—Population, 2,079; has a village hall, value \$7,500; in 1900 expended \$1,500 for public improvements; village indebtedness \$73,000; has one police officer; entire expense of police force 1899, \$500; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$150; for man and team \$3.25. Has a volunteer fire department consisting of 30 men who receive 50 cents per fire; chief, D. J. Prosser, no salary; has steam and hand engines; value of property belonging to the department \$2,500. Has a village marshal who receives \$40 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has one night-watch with police power; has no village lockup. H. Nichols, president; W. H. McCartney, clerk; C. W. Schaupt, marshal.

CHELSEA—Population, 1,635; has no village hall; in 1900 expended \$1,000 for public improvements; village indebtedness \$46,000; has one police officer; entire expense of police force in 1899, \$425; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.75. Has a volunteer fire department consisting of 13 men who receive 25 cents per hour for actual service; chief, John A. Palmer, who receives no pay; has two chemical engines; value of property belonging to the department \$1,200. Has a village marshal who receives \$420 per year and statutory fees, has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. William Bacon, president; W. H. Heselschwerdt, clerk; E. V. Morse, marshal.

CHESANING—Population, 1,244; has a village hall, value \$600; in 1900 expended \$1,000 for public improvements; village indebtedness \$18,500; has one police officer; entire expense of police force, 1899, \$100; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, number of men not given; chief, F. A. Greenfelder; men and chief receive no pay; has no fire engine; value of property belonging to the department \$600. Has a village marshal who receives \$34 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. D. W. Finley, president; Charles W. Cheeney, clerk; C. S. Masters, marshal.

CLARKSTON—Population, 360; has no village hall; in 1900 expended \$400 for public improvements; village indebtedness \$50; has two police officers, including marshal; entire expense of police force in 1899, \$25; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has one deputy sheriff and three

constables actively serving in the village; has no village lockup. J. Taylor, president; John A. Beardsley, clerk; Peter Green, marshal.

CLAYTON—Population, 370; has a village hall, value \$1,000; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$25; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, number of men not given; chief, J. S. Wolf; salary \$5.00 per year; has a hand engine; value of property belonging to the department \$700. Has a village marshal who receives a salary of \$25 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Wilson Duncan, president; Joseph C. Hale, clerk; Roy Bates, marshal.

CLIFFORD—Population, 339; has no village hall; in 1900 expended \$300 for public improvements; village indebtedness \$300; has one police officer; entire expense of police force, 1899, \$25; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.10; for man and team \$2.25. Has no organized fire department but has hand engine; value of property belonging to the department \$300. Has a village marshal who receives \$24 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. Williams, president; E. M. Wilbur, clerk; G. F. Spedding, marshal.

CLIMAX—Population, 398; has no village hall; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$20; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has two constables actively serving in the village; has no village lockup. F. Hodgman, president; F. M. Waters, clerk; G. H. McIlvain, marshal.

CLINTON—Population, 1,038; has a village hall; value \$7,000; in 1900 expended \$350 for public improvements; village indebtedness \$2,000; has one police officer; entire expense of police force, 1899, \$90; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50; has no organized fire department, but has chemical engine; value of property belonging to the department \$50; has a village marshal who receives \$90 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. E. L. Parker, president; Fred Koernig, clerk; James Farrel, marshal.

CLIO—Population, 640; has a village hall, value \$500; in 1900 expended \$1,300 for public improvements; has no village indebtedness; has three police officers including marshal; entire expense of police force in 1899, \$468; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00; has a volunteer fire department consisting of 35 men who receive 12½ cents per hour for actual service. Chief, W. G. Diamond; salary \$25.00 per year; has a hand engine; value of property belonging to the department \$2,500; has a village marshal who receives \$125 per year and statutory fees, also two other police officers and one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. N. W. Mann, president; T. W. Smithson, clerk; W. G. Diamond, marshal.

COLEMAN—Population, 1,014; has no village hall; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$420; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.35; for man and team \$2.75; has a volunteer fire department, number of men not given. George Burk, chief; company receive no pay; has hand engine; value of property belonging to the department \$400; has a village marshal who receives \$420 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. D. B. Menerey, president; Charles Haley, clerk; Alva Spencer, marshal.

COLOMA—Population, 687; has a village hall, value \$400; in 1900 expended \$800 for public improvements; has no village indebtedness; has one police officer; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.25; has no organized fire department, and no fire apparatus; has a village marshal who receives statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. L. W. Hamilton, president; T. W. Hewitt, clerk; William Kreitner, marshal.

COLUMBIAVILLE—Population, 457; has a village hall, value \$800; in 1900 expended \$700 for public improvements; village indebtedness \$685; has one police officer; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has a volunteer fire department consisting of 20 men; chief, C. E. Olney; men and chief receive no pay; has a hand engine; value of property belonging to the department \$1,600. Has a village marshal who receives statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. E. C. Stringer, president; W. S. Linabury, clerk; James McIntyre, marshal.

CONCORD—Population, 534; has no village hall; in 1900 expended \$1,500 for public improvements; has no village indebtedness; has one

police officer; entire expense of police force in 1899, \$25; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire engine; value of property belonging to the department \$400. Has a village marshal who receives \$350 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. A. Calhoun, president; G. A. Stahley, Jr., clerk; Charles H. Beebe, marshal.

CONSTANTINE—Population, 1,226; has a village hall, value \$2,500; in 1900 expended \$500 for public improvements; village indebtedness \$4,000; has one police officer; entire expense of police force in 1899, \$100; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.75. Has a volunteer fire department consisting of a company of 20 men, the company receives \$300 per year; chief, John Symons; salary \$15 per year; has no fire engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$300 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. S. J. Heimbach, president; H. W. Francisco, clerk; H. C. Drake, marshal.

COOPERSVILLE—Population, 660; has no village hall; in 1900 expended \$600 for public improvements; village indebtedness \$1,200; has two police officers, including marshal; entire expense of police force in 1899, \$100; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has a steam engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$65 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Charles N. Nye, president; E. M. Reed, clerk; C. F. Hammond, marshal.

COPEMISH—Population, 429; has no village hall; in 1900 expended \$600 for public improvements; village indebtedness \$200; has one police officer; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.35; for man and team \$3.00. Has no organized fire department, but has a hand engine; value of property belonging to the department \$500. Has a village marshal who receives \$30 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. Himmins, president; R. K. Lewis, clerk; F. J. Avery, marshal.

CROSWELL—Population, 606; has a village hall, value \$800; in 1900 expended \$4,000 for public improvements; village indebtedness \$13,000; has one police officer; entire expense of police force in 1899, \$125; general business is the same as in 1899; has no idle men unable to obtain work;

average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 21 men; chief, D. E. Wise; chief and men receive no pay; has no engine; value of property belonging to the department \$500. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. P. L. Graham, president; I. S. Niles, clerk; Charles McGuiness, marshal.

CROTON—Population, 59; has no village hall; in 1900 expended \$100 for public improvements; has no village indebtedness; has one police officer; expense of police force in 1899 not given; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has four constables actively serving in the village; has no village lockup. E. E. Rice, president; S. B. Gameiler, clerk; Alfred Ganweiler, marshal.

CUSTER—Population, 269; has no village hall; in 1900 expended \$350 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.75. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. S. S. Lampman, president; M. J. Morrison, clerk; M. Howard, marshal.

DANSVILLE—Population, 374; has a village hall, value \$300; in 1900 expended \$350 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$100; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department; number of men not given; chief, W. C. Keene; chief and men receive no pay; has a chemical engine; value of property belonging to the department \$800. Has a village marshal who receives \$40 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. James F. Lemon, president; Maynard W. May, clerk; C. F. West, marshal.

DAVISON—Population, 751; has a village hall, value \$8,000; in 1900 expended \$1,250 for public improvements; village indebtedness \$4,000; has one police officer; entire expense of police force in 1899, \$80; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.50; has a volunteer fire department consisting of 14 men who receive 50 cents per month, \$1.50 per fire and 75 cents for each false alarm; chief, H. Howes; salary \$6.00 per year; has a hand engine; value of property belonging to

the department \$1,500. Has a village marshal who receives \$78 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. B. Cullen, president; S. J. McBrattery, clerk; L. G. Adams, marshal.

DEARBORN—Population, 844; has a village hall, value \$3,000; in 1900 expended \$1,500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$75; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Thomas T. Woods, president; William E. Knodt, clerk; Charles F. Forsyth, marshal.

DECATUR—Population, 1,356; has a village hall, value \$5,000; in 1900 expended \$6,000 for public improvements; village indebtedness \$15,000; has two police officers including marshal; entire expense of police force in 1899, \$450; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 30 men; chief, John Shadd; chief and men receive no pay; has hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$30 per year and statutory fees; has one deputy sheriff actively serving in the village; has one night-watch with police power; has a village lockup in which one prisoner was confined on the first day of May, 1900. J. E. Maxwell, president; Claud E. Young, clerk; J. S. Vought, marshal.

DECKERVILLE—Population, 398; has a village hall, value \$1,200; in 1900 expended \$1,000 for public improvements; village indebtedness \$1,200; has one police officer; entire expense of police force in 1899, \$25; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$25 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. G. B. Forrester, president; C. H. Clement, clerk; Peter Pelton, marshal.

DEERFIELD—Population, 440; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$350. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively

serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. B. McLachlin, president; V. B. Cannon, clerk; G. V. Sisson, marshal.

DELRAY—Population, 4,573; has no village hall; in 1900 expended \$19,000 for public improvements; village indebtedness \$71,200; has six police officers including marshal; entire expense of police force in 1899, \$720; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.50. Has a volunteer fire department, number of men not given; chief, Charles Boston; chief and men receive no pay; has no fire engine; value of property belonging to the department \$2,000. Has a village marshal who receives \$60 per year and statutory fees; has four deputy sheriffs and one constable actively serving in the village; has no village lockup. F. O. Fisher, president; Theodore F. Zech, clerk; William J. Frasier, marshal.

DEXTER—Population, 900; has no village hall; in 1900 expended \$1,000 for public improvements; village indebtedness \$400; has one police officer; entire expense of police force in 1899, \$120; general business is not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$350. Has a village marshal who receives \$120 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. D. E. Quish, president; J. W. Barley, clerk; Jacob Rieder, marshal.

DOUGLAS—Population, 444; has no village hall; in 1900 expended nothing for public improvements; village indebtedness \$485; has one police officer; entire expense of police force in 1899, \$10; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.75. Has a volunteer fire department consisting of 26 men; chief, Henry Schultz; men and chief receive no pay; has hand and chemical engines; value of property belonging to the department \$1,200. Has a village marshal who receives \$25 per year and statutory fees; has two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. D. M. Gerber, president; L. W. McDonald, clerk; A. W. Walker, marshal.

DRYDEN—Population, 328; has no village hall; in 1900 expended \$450 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$75; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$15 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were con-

fined on the first day of May, 1900. Homer L. Parker, president; F. W. Kendrick, clerk; Alvah Montney, marshal.

DUNDEE—Population, 1,118; has a village hall, value \$2,500; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has three police officers including marshal; entire expense of police force in 1899, \$150; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has steam and chemical engines; value of property belonging to the department \$1,400. Has a village marshal who receives \$100 per year and statutory fees; has two deputy sheriffs and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Charles E. Stanger, president; H. J. Babcock, clerk; E. E. Johnson, marshal.

DURAND—Population, 2,134; has a village hall, value \$3,500; in 1900 expended \$35,000 for public improvements; village indebtedness \$18,000; has one police officer; entire expense of police force in 1899, \$230; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 30 men who are paid by the hour for actual service; chief, W. R. Hopkins, who receives no salary; has a chemical engine; value of property belonging to the department \$2,500. Has a village marshal who receives \$104 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has a village lockup in which two prisoners were confined on the first day of May, 1900. F. H. Potter, president; A. A. Gray, clerk; J. M. Huston, marshal.

EAGLE—Population, 142; has no village hall; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. D. F. Eddy, president; A. R. Bennett, clerk; Robert W. David, marshal.

EAST GRAND RAPIDS—Population, 466; has no village hall; in 1900 expended \$600 for public improvements; has no village indebtedness; has five police officers including marshal; entire expense of police force in 1899, \$400; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department; depends on city of Grand Rapids. Has a village marshal who receives \$250 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. E. Apsey, president; C. F. Sargent, clerk; C. E. Morgan, marshal.

EAST JORDAN—Population, 1,205; has no village hall; in 1900 expended \$1,000 for public improvements; village indebtedness \$12,000; has one police officer; entire expense of police force in 1899, \$300; general business is not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$300 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. L. French, president; W. J. Palmer, clerk; William Johnson, marshal.

EAU CLAIRE—Population, 281; has no village hall; in 1900 expended \$600 for public improvements; has no village indebtedness; has two police officers, including marshal; entire expense of police force in 1899 \$100; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has no organized fire department and has no fire engine, but has other property valued at \$100. Has a village marshal who receives statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. A. Critchlow, president; E. Clark, clerk; Albert Lord, marshal.

EDMORE—Population, 642; has a village hall, value \$500; in 1900 expended \$600 for public improvements; has no village indebtedness; has one police officer; expense of police force in 1899 not given; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of six men; chief, L. D. Curtis; men and chief receive \$2.00 per fire each; has no fire engine; value of property belonging to the department \$10,000. Has a village marshal who receives statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. E. Brown, president; F. D. Swift, clerk; William White, marshal.

ELKTON—Population, 471; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$322; has one police officer; entire expense of police force in 1899, \$3.00; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.12; for man and team \$2.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$240. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. H. C. Wales, president; W. L. Doyle, clerk; Redford Caverly, marshal.

ELSIE—Population, 576; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police

officer; entire expense of police force in 1899, \$50; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.12; for man and team \$2.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$100. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. R. VanDusan, president; Chas. Snelling, clerk; G. H. Baker, marshal.

EMMETT—Population, 265; has no village hall; in 1900 expended \$500 for public improvements; has one police officer; entire expense of police force in 1899, \$25; general business is not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but a hand engine; value of property belonging to the department \$200. Has a village marshal who receives \$55 per year and statutory fees; has a village lockup in which no prisoners were confined on the first day of May, 1900. H. P. McCabe, president; Frank Keough, clerk; John F. Buckley, marshal.

EMPIRE—Population, 609; has no village hall; in 1900 expended nothing for public improvements; village indebtedness \$700; has one police officer; entire expense of police force in 1899, \$336; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.60; for man and team \$3.50. Has no organized fire department and no fire engine; value of property belonging to the department \$50. Has a village marshal who receives \$300 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. James Daly, president; M. La Rue, clerk; M. F. Horen, marshal.

ESSEXVILLE—Population, 1,639; has no village hall; in 1900 expended \$3,500 for public improvements; has no village indebtedness; has two police officers, including marshal; entire expense of police force in 1899, \$530; general business is the same as in 1899; has some idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department consisting of 20 men who receive \$1.00 per fire; chief, John Lenox, with no salary; has a chemical engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$480 per year and statutory fees; has one regular man who receives \$75 per year and fees, and two constables actively serving in the village; has no village lockup. Sidney A. Hall, president; William Felker, clerk; John Lenox, marshal.

EVART—Population, 1,360; has a village hall, value \$2,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$9,000; has five police officers, including marshal; entire expense of police force in 1899, \$185; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for

man and team \$2.50. Has a volunteer fire department consisting of 25 men; chief, D. E. Forton; chief and men receive \$1.00 per fire each; has no fire engine; value of property belonging to the department \$3,000. Has a village marshal who receives \$100 per year and statutory fees; has three constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. E. F. Birdsall, president; Irwin Chase, village clerk; Percy Robson, marshal.

FARMINGTON—Population, 530; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$400; has one police officer; entire expense of police force in 1899, \$15; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$10 per year and statutory fees; has one deputy sheriff actively serving in the village; has no village lockup. Fred N. Warner, president; J. J. Webster, clerk; C. H. White, marshal.

FARWELL—Population, 535; has a village hall, value \$300; in 1900 expended \$1,600 for public improvements; village indebtedness \$2,500; has one police officer; entire expense of police force in 1899, \$35; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department, number of men not given; chief, John J. Saxton; chief and men receive no pay; has no engine; has no property belonging to the department. Has a village marshal who receives \$35 per year and statutory fees; has two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. L. Wiesman, president; H. M. Roys, clerk; George J. Smith, marshal.

FENNVILLE—Population, 454; has no village hall; in 1900 expended \$1,300 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$75; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, number of men not given; chief G. L. Dutcher, salary \$12 per year; men receive no pay; has hand and a chemical engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$75 per year and statutory fees; has two deputy sheriffs and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. A. Pieters, president; C. L. Fosdeck, clerk; Joseph Lane, marshal.

FENTON—Population, 2,408; has a village hall, value \$4,000; in 1900 expended \$5,000 for public improvements; village indebtedness \$25,000; has one police officer; entire expense of police force in 1899, \$672; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 12 men who receive \$25 per year each; chief, W. Becker, salary \$25 per year; has a steam engine;

value of property belonging to the department \$5,000. Has a village marshal who receives \$520 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. J. Campbell, president; F. J. Conklin, clerk; C. B. Hamilton, marshal.

FIFE LAKE—Population, 456; has a village hall, value \$300; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$100; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has no organized fire department, but has chemical engine; value of property belonging to the department \$500. Has a village marshal who receives \$100 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. S. Gardner, president; L. S. Walters, clerk; William H. Wells, marshal.

FLUSHING—Population, 900; has a village hall, value \$1,500; in 1900 expended nothing for public improvements; village indebtedness \$26,500; has four police officers including marshal; entire expense of police force in 1899, \$435; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.35; for man and team \$2.50. Has a volunteer fire department, number of men not given; chief, J. B. French; men and chief receive no pay; has hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$39 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. R. O. Hart, president; A. E. Ball, clerk; Oliver Way, marshal.

FORESTVILLE—Population, 282; has no village hall; in 1900 expended \$200 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$36; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$36 per year and statutory fees; has no village lockup. Alexander Stephens, president; W. L. Smith, clerk; Albert Hirzel, marshal.

FOWLER—Population, 426; has a village hall, value \$1,000; in 1900 expended \$500 for public improvements; village indebtedness \$150; has one police officer; entire expense of police force in 1899, \$75; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 14 men, who receive no pay; chief's name not given; has a hand engine; value of property belonging to the department \$600. Has a village marshal who receives \$25 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prison-

ers were confined on the first day of May, 1900. J. F. Wood, president; J. F. Shraft, clerk; Philo Parks, marshal.

FOWLerville—Population, 946; has a village hall, value \$4,000; in 1900 expended nothing for public improvements; village indebtedness \$1,000; has one police officer; entire expense of police force, 1899, \$300; general business the same; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has no organized fire department, but has a fire warden who receives \$10 per year; no engine; value of property belonging to the department \$500. Has a village marshal who receives \$52 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which one prisoner was confined on the first day of May, 1900. A. R. Gardner, president; A. A. Hughes, clerk; James McCarthy, marshal.

FRANKFORT—Population, 1,465; has no village hall; in 1900 expended \$3,000 for public improvements; village indebtedness \$13,950; has one police officer; entire expense of police force in 1899, \$560; general business better than in 1899; has no idle men unable to obtain work; average wages paid \$1.50; for man and team \$3.50. Has a volunteer fire department, consisting of 22 men; chief, A. A. Smith; men and chief receive no pay; has no fire engine; value of property belonging to the department \$500. Has a village marshal who receives \$540 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. D. G. F. Warner, president; B. W. Snider, clerk; J. A. Hollabaugh, marshal.

FRASER—Population, 252; has no village hall; in 1900 expended \$200 for public improvements; has no village indebtedness; has one police officer; general business the same; has no idle men unable to obtain work; average wages paid day laborers \$1.37; for man and team \$275. Has no organized fire department, but has a hand engine; value of property belonging to the department \$500. Has a village marshal who receives statutory fees; has a village lockup in which no prisoners were confined on the first day of May, 1900. Charles Steffens, president; George Steffens, clerk; Edward Fruehauf, marshal.

FREMONT—Population, 1,331; has a village hall, value \$1,000; in 1900 expended \$1,500 for public improvements; village indebtedness \$11,800; has one police officer; entire expense of police force in 1899, \$500; general business is not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 36 men; chief, C. M. Gibson; chief and men receive no pay; has a chemical engine; value of property belonging to the department \$7,016. Has a village marshal who receives \$390 per year and statutory fees; has two deputy sheriffs and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. John Mullen, president; F. H. Marsh, clerk; E. D. Sage, marshal.

FRUITPORT—Population, 311; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has one deputy sheriff and four constables actively serving in the village; has no village lockup. John G. Westover, president; F. H. Abbott, clerk; Frank Richardson, marshal.

GAGETOWN—Population, 329; has a village hall, value \$300; in 1900 expended \$300 for public improvements; village indebtedness \$150; has one police officer; entire expense of police force in 1899, \$30; general business is not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$30 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. O. A. Rogers, president; Louis Lenhard, clerk; Devillo Burton, marshal.

GAINES—Population, 240; has no village hall; in 1900 expended \$200 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$40; general business is the same as in 1899; has no idle men in the village unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$40 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. D. W. McCaughna, president; Harmon Judson, clerk; Alva Croope, marshal.

GALESBURG—Population, 689; has a village hall, value \$500; in 1900 expended \$1,350 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$75; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department; value of property belonging to the department not given. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. H. H. Warren, president; S. A. Loveland, clerk; James Illic, marshal.

GARDEN—Population, 465; has a village hall, value \$2,500; in 1900 expended \$700 for public improvements; has no village indebtedness; has one police officer; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department, but has hand engine; value of property belonging to the department \$700. Has a village marshal who receives statutory fees; has one deputy sheriff

and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. John Bonifas, president; Daniel Kelly, clerk; Herman Winter, marshal.

GALIEN—Population, 440; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$120; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire engine; value of property belonging to the department \$10. Has a village marshal who receives \$120 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. D. W. Swem, president; D. B. Prince, clerk; B. C. Clark, marshal.

GAYLORD—Population, 1,561; has a village hall, value \$500; in 1900 expended \$2,100 for public improvements; village indebtedness \$15,000; has three police officers, including marshal; entire expense of police force in 1899, \$600; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.37; for man and team \$3.00. Has a volunteer fire department consisting of 30 men, chief, Gustave Harris; company receive no pay; has no fire engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$600 per year and statutory fees; has two regular men and three deputy sheriffs actively serving in the village; has no village lockup. S. E. Qua, president; H. T. Glezen, clerk; Thomas Lambert, marshal.

GOBLEVILLE—Population, 505; has no village hall; in 1900 expended nothing for public improvements; village indebtedness \$450; has one police officer; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.25. Has a volunteer fire department; number of men not given; chief, R. E. Vickers; chief and men receive no pay; has hand and chemical engines; value of property belonging to the department \$700. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. Saul Frank, president; Adelbert Lober, clerk; Eugene Dustin, marshal.

GRANDVILLE—Population, 457; has a village hall, value \$500; in 1900 expended \$200 for public improvements; has no village indebtedness; has one police officer; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department consisting of 20 men; chief, E. E. Jewell; chief and men receive no pay; has a chemical engine; value of property belonging to the department \$800. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of

May, 1900. R. S. Phipps, president; E. E. Jewell, clerk; James M. Jewell, marshal.

GRANT—Population, 214; has no village hall; in 1900 expended \$350 for public improvements; has no village indebtedness; has two police officers, including marshal; entire expense of police force in 1899, \$20; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$10 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. P. Drummond, president; H. C. Hemingsen, clerk; J. Snook, marshal.

GRASS LAKE—Population, 648; has no village hall; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$100; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.87; for man and team \$3.25. Has a volunteer fire department; number of men not given; chief, William Campbell; chief and men receive no pay; has a chemical engine; value of property belonging to the department \$1,000. Has a village marshal who receives statutory fees; has one deputy sheriff and three constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. E. M. Sanford, president; C. E. Rogers, clerk; George M. Wolfinger, marshal.

GROSSE POINTE—Population, 343; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has no organized fire department; depends on Detroit for protection. Has a village marshal who receives \$35 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. F. L. Cadieux, president; R. P. Connor, clerk; Charles Hilyendorf, marshal.

GROSSE POINTE FARMS—Population, 817; has a village hall, value \$2,000; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.38; for man and team \$3.50. Has no organized fire department; depends on Detroit for protection. Has a village marshal who receives statutory fees; has one constable actively serving in the village; has one night-watch with police power; has no village lockup. J. H. Berry, president; H. G. Sherrad, clerk; Jacob Fisher, marshal.

HADLEY—Has no village organization.

HANCOCK—Population, 4,050; has a village hall, value \$30,000; in 1900 expended \$30,000 for public improvements; village indebtedness

\$30,000; has two police officers, including marshal; entire expense of police force in 1899, \$2,700; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.80; for man and team \$4.50. Has a paid fire department consisting of four full time men and 20 part time men; full time men receive \$60 per month each; part time men \$3.00 per month each; chief, A. J. Scott, who receives no pay; has a steam engine; value of property belonging to the department \$8,000. Has a village marshal who receives \$65 per month and statutory fees; has four deputy sheriffs and two constables actively serving in the village; has two night-watchers with police power; has a village lockup in which three prisoners were confined on the first day of May, 1900. A. J. Scott, president; M. Finn, clerk; Joseph Malherbe, marshal.

HANOVER—Population, 378; has no village hall; in 1900 expended \$400 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$15; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 30 men, who receive no pay; chief, C. K. Markham, salary \$5.00 per year; has a chemical engine; value of property belonging to the department \$600. Has a village marshal who receives statutory fees; has one deputy sheriff actively serving in the village; has no village lockup. A. L. Ambrose, president; W. C. Watson, clerk; H. Hall, marshal.

HARBOR BEACH—Population, 1,149; has a village hall, value \$6,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$24,000; has one police officer; entire expense of police force in 1899, \$300; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 20 men; chief, C. F. Dow; chief and men receive no pay; has no fire engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$312 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which one prisoner was confined on the first day of May, 1900. Philip Binkle, president; J. L. Brennan, clerk; Levi Lytle, marshal.

HARBOR SPRINGS—Population, 1,643; has a village hall, value \$7,000; in 1900 expended \$2,000 for public improvements; village indebtedness \$8,500; has one police officer; entire expense of police force in 1899, \$80; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$2.00; for man and team \$3.75. Has a volunteer fire department, consisting of 20 men, who are paid per fire; Edward Juillerette, chief; has hand engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$540 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has a village lockup in which two prisoners

were confined on the first day of May, 1900. G. Burke, president; A. B. Backus, clerk; Thomas Regis, marshal.

HARRIETTA—Population, 419; has a village hall, value \$200; in 1900 expended \$250 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$25; general business is better than in 1899; has no idle men unable to obtain work; average wages paid \$1.50; for man and team \$3.25. Has a volunteer fire department, consisting of 30 men who are paid per fire; chief, Charles Van Riper; has hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Will Barry, president; Alex Graham, clerk; Norman Fox, marshal.

HARRISVILLE—Population, 403; has no village hall; in 1900 expended \$500 for public improvements; has one police officer; entire expense of police force in 1899, \$30; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$50 per year and statutory fees; has two deputy sheriffs and one constable actively serving in the village; has no village lockup. John MacGregor, president; E. W. Chapelle, clerk; G. W. La Chapelle, marshal.

HART—Population, 1,134; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$1,500; has two police officers; including the marshal; entire expense of police force in 1899, \$300; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.50. Has a volunteer fire department, consisting of 15 men; chief, James McVean; chief and men receive 50 cents per hour for actual service; has no fire engine; value of property belonging to the department \$1,200. Has a village marshal who receives \$72 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has no village lockup. J. H. Colby, president; W. O'Reilly, clerk; J. W. McPherson, marshal.

HARTFORD—Population, 1,077; has a village hall, value \$2,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$1,500; has two police officers including the marshal; entire expense of police force in 1899, \$500; general business not as good as in 1899; has no idle men unable to obtain work; average paid day laborers \$1.12; for man and team \$2.50. Has a volunteer fire department, consisting of 20 men who are paid per fire; chief, Frank Eagan; has hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$350 per year and statutory fees; has one regular man who receives \$300 per year, one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day

of May, 1900. Freeman Stowe, president; Frank M. Deane, clerk; Chauncy Drake, marshal.

HERSEY—Population, 327; has no village hall; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police officer; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$25 per year and statutory fees; has no village lockup. A. L. Brooks, president, T. D. Twist, clerk; Emmett Hinkley, marshal.

HESPERIA—Population, 474; has a village hall, value \$400; in 1900 expended \$800 for public improvements; village indebtedness \$2,000; has one police officer; entire expense of police force in 1899, \$144; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.37; for man and team \$2.75. Has a volunteer fire department, consisting of 26 men; chief, Louis Wellman; men and chief receive no pay; has no fire engine; value of property belonging to the department \$2,000. Has a village marshal who receives \$72 per year and statutory fees; has two deputy sheriffs and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. S. B. Rolison, president; O. Z. Hawley, clerk; Charles Robbins, marshal.

HIGHLAND PARK—Population, 427; has no village hall; in 1900 expended nothing for public improvements; village indebtedness \$75,000; has one police officer; entire expense of police force in 1899, \$700; general business is better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.50. Has a volunteer fire department, consisting of 12 men who receive no pay; chief, George Clayton, salary \$100 per year; has a chemical engine; value of property belonging to the department \$800. Has a village marshal who receives \$300 per year and statutory fees; has four deputy sheriffs and two constables actively serving in the village; has one night-watch with police power; has no village lockup. G. M. Voorhis, president; J. W. Brenkert, clerk; Peter Brazeau, marshal.

HILLMAN—Population, 253; has no village hall; in 1900 expended \$600 for public improvements; village indebtedness \$200; has one police officer; entire expense of police force in 1899, \$25; general business is the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.50. Has a volunteer fire department, number of men not given; Andrew Hanson, chief; no salary; has a hand engine; value of property belonging to the department \$500. Has a village marshal who receives \$25 and statutory fees; has two deputy sheriffs and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. John A. Holmes, president; W. W. Murphey, clerk; William J. Rea, marshal.

HOLLY—Population, 1,419; has a village hall, value \$3,500; in 1900 expended \$3,000 for public improvements; village indebtedness \$6,500; has one police officer; entire expense of police force in 1899, \$400; general business is not so good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 21 men, who receive \$1.00 per month each; chief, J. M. Belford, salary \$15 per year; has no fire engine; value of property belonging to the department \$2,000. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. J. Barrett, president; F. Joe Hass, clerk; Melvin Armstrong, marshal.

HOMER—Population, 1,097; has a village hall, value \$2,500; in 1900 expended \$1,200 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$100; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 47 men who receive 35 cents each per month for two meetings; chief, G. F. Seitz; salary \$10 per year; has a chemical and hand engine; value of property belonging to the department \$2,500. Has a village marshal who receives \$75 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has a village lockup in which one prisoner was confined on the first day of May, 1900. Ethan R. Allen, president; L. T. Van Horn, clerk; Andrew Dorsey, marshal.

HOUGHTON—Population, 3,359; has a village hall, value \$16,000; in 1900 expended nothing for public improvements; village indebtedness \$73,000; has one police officer; entire expense of police force in 1899, \$3,050; general business the same as 1899; has no idle men unable to obtain work; average wages paid day laborers \$2.00; for man and team \$4.50. Has a paid fire department, consisting of one full time man and 60 part time men, full time man receives \$60 per month; part time men are paid per fire; Louis Voetsch, chief; has a steam engine; value of property belonging to the department \$7,000. Has a village marshal who receives \$840 per year and statutory fees; has three deputy sheriffs and one constable actively serving in the village; has two night-watchers with police power; has no village lockup. Joseph Croze, president; Casper Brand, clerk; Louis Voetsch, marshal.

HOWARD CITY—Population, 1,398; has no village hall; in 1900 expended \$2,000 for public improvements; village indebtedness \$8,000; has one police officer; entire expense of police force in 1899, \$100; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 27 men who receive 25 cents for false alarms and 50 cents per hour while at fires; chief, W. H. Collins; no salary; has no fire engine; value of property belonging to the department \$2,000. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff actively serving in the village;

has a village lockup in which no prisoners were confined on the first day of May, 1900. J. A. Collins, president; C. W. Withey, clerk; G. T. Underhill, marshal.

HOWELL—Population, 2,518; has a village hall, value \$2,500; in 1900 expended nothing for public improvements; village indebtedness \$40,000; has one police officer; entire expense of police force in 1899, \$200; general business not so good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.75. Has a volunteer fire department, consisting of 10 men who receive \$15 per year each; chief, W. R. Knapp; salary \$150 per year; has a chemical engine; value of property belonging to the department \$3,000. Has a village marshal who receives \$175 per year and statutory fees; has two deputy sheriffs and one constable actively serving in the village; has one night-watch with police power; has a village lockup in which two prisoners were confined on the first day of May, 1900. Louis E. Howlett, president; C. P. Adams, clerk; Joseph A. Frank, marshal.

HUBBARDSTON—Population, 450; has a village hall, value \$300; in 1900 expended \$400 for public improvements; village indebtedness \$300; has one police officer; entire expense of police force in 1899, \$25; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department, but has a hand engine; value of property belonging to the department \$1,000. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. W. Brown, president; H. J. Holbrook, clerk; James Belcher, marshal.

IMLAY CITY—Population, 1,122; has no village hall; in 1900 expended \$6,000 for public improvements; village indebtedness \$18,000; has one police officer; entire expense of police force in 1899, \$100; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.00. Has a volunteer fire department, number of men not given; chief, T. B. Keyworth; has no fire engine; value of property belonging to the department \$450. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. D. V. Yerex, president; John Robinson, clerk; Marvin Welton, marshal.

IRON RIVER—Population, 1,482; has a village hall, value \$3,000; in 1900 expended \$900 for public improvements; village indebtedness \$4,020; has one police officer, entire expense of police force in 1899, \$540; general business much better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$2.00; for man and team \$4.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$520 per year and statutory fees; has two deputy sheriffs and three constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of

May, 1900. J. B. Abbott, president; Jesse Allen, clerk; John McHugh, marshal.

ITHACA—Population, 2,020; has a village hall, value \$10,000; in 1900 expended \$10,000 for public improvements; village indebtedness \$20,000; has one police officer; entire expense of police force in 1899, \$570; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a paid fire department, consisting of one full time man, and 20 part time men; full time man receives \$35 per month; part time men \$1.50 per day for actual service; chief, A. P. Lane; no salary; has hand engine; value of property belonging to the department \$3,150. Has a village marshal who receives \$480 per year and statutory fees; has one deputy sheriff and four constables actively serving in the village; has one night-watch with police power; has no village lockup. J. M. Everden, president; M. R. Salter, clerk; Hart Baker, marshal.

JONESVILLE—Population, 1,397; has a village hall, value \$3,000; in 1900 expended \$4,000 for public improvements; village indebtedness \$31,000; has two police officers including the marshal; entire expense of police force in 1899, \$100; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has an organized volunteer fire department, having 20 men without pay; chief, Chas. A. Daniels; salary \$10 per year; has a steam engine; value of property belonging to the department \$2,000. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. S. M. Glasgow, president; L. W. Tibbald, clerk; Michael Phinny, marshal.

KALKASKA—Population, 1,304; has a village hall, value \$1,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$25,000; has one police officer; entire expense of police force in 1899, \$480; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.50. Has a volunteer fire department, consisting of 15 men; who are paid per fire; chief, William Moran; no salary; has no fire engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$480 per year and statutory fees; has two deputy sheriffs actively serving in the village; has one night-watch with police power; has no village lockup. T. D. Hobbs, president; George Parker, clerk; H. R. Sherwood, marshal.

KINGSLEY—Population, 419; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$300; has two police officers including the marshal; entire expense of police force in 1899, \$75; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department, but has a chemical engine; value of property belonging to the department \$750. Has a village marshal who

receives \$25 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. John Huff, president; N. B. Stinson, clerk; William W. Wurzburg, marshal.

KINGSTON—Population, 286; has a village hall, value \$500; in 1900 expended \$600 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$35; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.25. Has no organized fire department, but has a hand engine; value of property belonging to the department \$400. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. E. A. Randall, president; J. B. Beverley, clerk.

LAINGSBURG—Population, 690; has a village hall, value \$2,000; in 1900 expended \$1,350 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$290; general business not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.25. Has a volunteer fire department, number of men not given; they receive 15 cents per hour for actual service; chief, H. V. Vanderhoof; no salary; has a hand engine; value of property belonging to the department \$1,200. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. H. Benson, president; G. W. Mosher, clerk; L. M. Sutphin, marshal.

LAKE ANN—Population, 241; has no village hall; in 1900 expended nothing for public improvements; village indebtedness \$4,000; has one police officer; entire expense of police force in 1899 not given; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$300 per year and statutory fees; has no village lockup. A. Schneider, president; N. E. Degen, clerk; William Alexander, marshal.

LAKE CITY—Population, 816; has no village hall; in 1900 expended \$300 for public improvements; village indebtedness \$2,000; has one police officer; entire expense of police force in 1899, \$20; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.37; for man and team \$2.50. Has no organized fire department and no fire engine, but has property belonging to the department valued at \$2,000. Has a village marshal who receives \$36 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. F. O. Goffney, president; C. L. Goll, clerk; Frank Tennant, marshal.

LAKE LINDEN—Population, 2,509; has a village hall; value \$2,500; in 1900 expended nothing for public improvements; village indebtedness \$25,000; has one police officer; entire expense of police force in 1899, \$900; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.75; for man and team \$4.50. Has a volunteer fire department, consisting of 12 men; chief, A. T. Heidkamp; men and chief receive no salary; has no fire engine; value of property belonging to the department \$3,000. Has a village marshal who receives \$900 per year and statutory fees; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. T. Heidkamp, president; Jacob Gries, clerk; John McKinnon, marshal.

LAKE ODESSA—Population, 1,037; has a village hall, value \$1,000; in 1900 expended \$1,500 for public improvements; village indebtedness \$11,000; has one police officer; entire expense of police force in 1899, \$150; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department, consisting of 30 men who receive 25 cents per hour for actual service; chief, Otis Miner; has no fire engine; value of property belonging to the department \$3,000. Has a village marshal who receives \$150 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. B. Nims, president; W. S. Ensign, clerk; M. F. Armour, marshal.

LAKE VIEW—Population, 935; has a village hall, value \$2,500; in 1900 expended nothing for public improvements; village indebtedness \$200; has one police officer; general business the same as in 1899; has no idle men unable to obtain work; average wages paid for day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, number of men not given; chief, E. E. Helmer; salary \$20 per year; has a hand engine; value of property belonging to the department \$600. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. F. French, president; C. E. White, clerk; C. A. Brink, marshal.

L'ANSE—Population, 620; has a village hall, value \$5,500; in 1900 expended \$400 for public improvements; village indebtedness \$11,500; has one police officer; entire expense of police force in 1899, \$200; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.75; for man and team \$4.00. Has a volunteer fire department, consisting of 24 men who receive \$1.75 per day for actual service; chief, August Menge; has a steam engine; value of property belonging to the department \$6,000. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff actively serving in the village; has no village lockup. J. Q. McKernan, president; Marin Voetsch, clerk; Octave Sicotte, marshal.

LAURIUM—Population, 5,643; has a village hall, value \$12,000; in 1900 expended \$15,000 for public improvements; village indebtedness \$70,000; has one police officer; entire expense of police force in 1899, \$2,160; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.75; for man and team \$5.00. Has a volunteer fire department consisting of 18 men who receive \$2.00 per fire and \$1.00 for each false alarm; chief, Henry Vogler; has a steam engine; value of property belonging to the department \$7,000. Has a village marshal who receives \$60 per year and statutory fees; has two constables actively serving in the village; has a village lockup in which one prisoner was confined on the first day of May, 1900. Henry Fliege, president; Peter Carrier, clerk; Michael McCarron, marshal.

LAWRENCE—Population, 598; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$250; has one police officer; entire expense of police force in 1899, \$60; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$300. Has a village marshal who receives \$48 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. H. A. Martin, president; G. M. Vining, clerk; T. O. Sweet, marshal.

LAWTON—Population, 942; has a village hall; value \$4,000; in 1900 expended \$3,000 for public improvements; village indebtedness \$7,000; has two police officers including marshal; entire expense of police force in 1899, \$50; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.25. Has no organized fire department, but has a hand engine; value of property belonging to the department \$300. Has a village marshal who receives \$50 per year and statutory fees; also one other police officer, two deputy sheriffs and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. G. W. Cornish, president; W. C. McCarthy, clerk; Frank Rawson, marshal.

LEONARD—Population, 335; has a village hall, value \$1,000; in 1900 expended \$250 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$40; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.15; for man and team \$2.50. Has no organized fire department; has no fire engine; value of property belonging to the department \$150. Has a village marshal who receives \$5.00 per year and statutory fees; has one constable actively serving in the village; has no village lockup. John S. Brown, president; William Yakeley, clerk; M. L. Fox, marshal.

LE ROY—Population, 375; has no village hall; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police

officer; entire expense of police force in 1899, \$35; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department, consisting of 8 men who are paid for actual service; chief, Ben Glerum; has hand engine; value of property belonging to the department \$350. Has a village marshal who receives \$25 per year and statutory fees; has three constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Ulysses S. Barr, president; A. H. Everett, clerk; F. C. Francisco, marshal.

LESLIE—Population, 1,114; has a village hall, value \$2,000; in 1900 expended nothing for public improvements; village indebtedness \$16,000; has one police officer; entire expense of police force in 1899, \$100; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.50. Has a volunteer fire department consisting of 14 men; chief, B. M. Gould; chief and men receive 75 cents per hour for actual service and 25 cents per hour for meetings; has hand engine; value of property belonging to the department \$500. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. H. Johnston, president; L. G. Torrey, clerk; E. E. Stone, marshal.

LEXINGTON—Population, 619; has a village hall, value \$10,000; in 1900 expended \$1,500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$150; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 50 men; chief, John Meyer; chief and men receive no pay; has hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$150 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Daniel Clarke, president; Grant H. Smith, clerk; John H. Oles, marshal.

LINDEN—Population, 543; has a village hall, value \$500; in 1900 expended \$400 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$25; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department; number of men not given; chief, P. R. Middlesworth; has a chemical engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$10 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Charles M. Howe, president; C. E. Hyatt, clerk; Silas Henry, marshal.

LISBON—Population, 187; has no village hall; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has no village lockup. E. King, president; V. E. McNitt, clerk; R. H. Beckwith, marshal.

LITCHFIELD—Population, 645; has a village hall, value \$250; in 1900 expended \$700 for public improvements; has one police officer; entire expense of police force in 1899, \$50; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.20; for man and team \$2.25. Has a volunteer fire department; number of men not given; chief, J. P. Bishop; chief and men receive no pay; has no fire engine; value of property belonging to the department \$100. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and four constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. E. Bodmer, president; W. H. Mattison, clerk; John P. Bishop, marshal.

LOWELL—Population, 1,736; has no village hall; in 1900 expended nothing for public improvements; village indebtedness \$25,000; has four police officers, including marshal; entire expense of police force in 1899, \$150; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50; has a volunteer fire department, consisting of 20 men, who receive \$2.00 per fire and \$1.00 for each false alarm; chief, Millard Scott; salary \$40 per year; has a hand engine; value of property belonging to the department \$1,600. Has a village marshal who receives \$250 per year and statutory fees; also three other police officers, one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. W. Weekes, president; T. A. Murphy, clerk; T. W. Mason, marshal.

LUTHER—Population, 837; has a village hall, value \$400; in 1900 expended \$600 for public improvements; village indebtedness \$100; has two police officers, including the marshal; entire expense of police force in 1899, \$25; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 15 men, who receive \$1.00 per fire and 20 cents for each meeting; chief, William Burnett; salary \$25 per year; has chemical and hand engines; value of property belonging to the department \$1,500. Has a village marshal who receives \$25 per year and statutory fees, and one other police officer; has one deputy sheriff and six constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. George Cutler, president; A. E. Hovey, clerk; F. W. Burnett, marshal.

LYONS—Population, 656; has no village hall; in 1900 expended \$3,000 for public improvements; village indebtedness \$5,500; has one police officer; entire expense of police force in 1899, \$100; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 25 men; chief, L. N. Hale; chief and men receive no pay; has no fire engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. S. W. Webber, Jr., president; E. N. Thayer, clerk; William A. Bloss, marshal.

MACKINAW CITY—Population, 564; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$7,000; has one police officer; entire expense of police force in 1899, \$50; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$50 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Samuel J. Smith, president; W. E. Murphy, clerk; C. H. Zimmerman, marshal.

MANCELONA—Population, 1,226; has a village hall, value \$400; in 1900 expended nothing for public improvements; village indebtedness \$11,000; has one police officer; entire expense of police force in 1899, \$250; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department, consisting of 18 men, who receive \$5.00 each per year; chief, George H. Fitch; has no engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$75 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. H. P. Chamberlain, president; D. A. Line, clerk; James I. Ayers, marshal.

MANCHESTER—Population, 1,209; has a village hall, value \$2,500; in 1900 expended \$2,500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$410; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 17 men, who receive 50 cents per hour for each fire, and fifty cents for each meeting; William Hamman, chief, no salary; has hand engine; value of property belonging to the department \$300. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on

the first day of May, 1900. E. C. Westgate, president; J. E. Blum, clerk; George Nisle, marshal.

MANISTIQUE—Population, 4,126; has no village hall; in 1900 expended \$5,000 for public improvements; village indebtedness \$6,500; has three police officers, including the marshal; expense of police force in 1899, \$2,500; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$4.00. Has a volunteer and paid fire department consisting of one full time and 16 part time men; full time man receives \$50 per month; part time men \$1.00 for first hour actual service and 50 cents for each hour thereafter; chief, John Loose, salary \$250 per year; has steam and hand engines; value of property not given. Has a village marshal who receives \$780 per year and statutory fees; has two regular men who receive \$2.00 per day; two deputy sheriffs and two constables actively serving in the village; has one night-watch with police power; has no village lockup. W. F. Crans, president; Joseph W. Scott, clerk; Frank Jachor, marshal.

MANTON—Population, 895; has a village hall, value \$500; in 1900 expended \$500 for public improvements; village indebtedness \$4,000; has one police officer; entire expense of police force in 1899, \$325; general business the same; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 24 men, who receive \$1.00 per fire; chief, Don Moore, salary \$50 per year; has no engine; value of property belonging to the department \$800. Has a village marshal who receives \$300 per year and statutory fees; has one constable actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. Charles H. Bostick, president; Arthur Bulkley, clerk; Richard Newland, marshal.

MAPLE RAPIDS—Population, 579; has a village hall, value \$500; in 1900 expended \$200 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business same as in 1899; has no idle men; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department; number of men not given; F. G. Casterline, chief; has hand engine; value of property belonging to the department \$2,000. Has a village marshal who receives \$40 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has village lockup in which no prisoners were confined on the first day of May, 1900. O. G. Webster, president; Lester Tylor, clerk; F. F. Owen, marshal.

MARCELLUS—Population, 1,023; has a village hall, value \$4,000; in 1900 expended \$2,000 for public improvements; village indebtedness \$9,000; has one police officer; entire expense of police force in 1899, \$150; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50.

Has a volunteer fire department, consisting of 35 men, who receive from 50 cents to \$1.00 per fire; chief, G. W. Adams, no salary; has no fire engine; value of property belonging to the department \$550. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. A. Sipley, president; G. R. Clemens, clerk; J. P. Foust, marshal.

MARION—Population, 741; has no village hall; in 1900 expended \$600 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$175; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire engine; value of property belonging to the department \$200. Has a village marshal who receives \$180 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Chris. Clark, president; A. W. Scoville, clerk; D. R. Rensberger, marshal.

MARLETTE—Population, 996; has a village hall, value \$500; in 1900 expended nothing for public improvements; village indebtedness \$22,000; has one police officer; entire expense of police force in 1899, \$105; general business the same; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 26 men who receive no pay; chief, C. McGovern; no salary; has a hand engine; value of property belonging to the department not given. Has a village marshal who receives \$75 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. E. A. Smith, president; A. E. Moore, clerk; W. N. Rogers, marshal.

MAYVILLE—Population, 825; has no village hall; in 1900 expended \$1,500 for public improvements; village indebtedness \$40; has one police officer; entire expense of police force in 1899, \$100; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$60 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. George F. Diamond, president; A. J. Bryant, clerk; F. Fallahay, marshal.

M'BAIN—Population, 709; has a village hall, value \$250; in 1900 expended \$400 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business the same; has no idle men; average wages paid day laborers \$1.37; for man and team \$3.37. Has no organized fire department, but has a hand engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$50 per year and statutory fees; has

one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May 1900. W. O. Cromwell, president; C. R. Burleson, clerk; William Brown, marshal.

M'BRIDE—Population, 289; has no village hall; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$25; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. H. La Flamboy, president; J. W. Bennett, clerk; William Simpson, marshal.

MECOSTA—Population, 416; has a village hall, value \$500; in 1900 expended \$250 for public improvements; has no village indebtedness; has one police officer; general business same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has steam engine; value of property belonging to the department \$3,000. Has no village marshal at present; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. G. S. Wilson, president; Joseph Wendling, clerk.

MEMPHIS—Population, 586; has a village hall, value \$1,000; in 1900 expended \$500 for public improvements; village indebtedness \$300; has one police officer; expense of police force in 1899 not given; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.00. Has no organized fire department, but has two chemical fire engines; value \$1,100. Has no village marshal; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. A. Hause, president; C. S. Gilbert, clerk.

MENDON—Population, 777; has a village hall, value \$3,000; in 1900 expended \$1,200 for public improvements; has no village indebtedness; has two police officers including the marshal; entire expense of police force in 1899, \$200; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.25. Has a volunteer fire department, consisting of 12 men who receive 50 cents for first hour and 25 cents thereafter; chief, George Engel; chief receives the same pay as the men; has a steam fire engine; value of property belonging to the department \$1,700. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. Isaac Shoomaker, president; G. E. Shank, clerk; W. R. Gifford, marshal.

MERRILL—Population, 459; has a village hall, value \$600; in 1900 expended \$1,500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$100; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, number of men not given; chief, J. B. Merrill; salary \$25 per year; men receive no pay; has a hand fire engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. H. Whitney, president; C. E. Johnston, clerk; William McLellan, marshal.

METAMORA—Population, 313; has no village hall; in 1900 expended nothing for public improvements; has no indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department, but has \$150 worth of property belonging to the department. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. John Fraser, president; E. G. Moses, clerk; F. A. Brigham, marshal.

MIDDLEVILLE—Population, 829; has no village hall; in 1900 expended \$1,700 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899 \$325; general business better than in 1899; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department but has two chemical engines; value of the property belonging to the department \$5,000. Has a village marshal who receives \$313 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. A. Dietrich, president; Albert Pinney, clerk; E. F. Farnum, marshal.

MILAN—Population, 1,141; has a village hall, value \$1,600; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department; number of men not given; chief, E. A. Farrington; men are paid by the hour, chief receives no salary; has a hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives statutory fees; has two deputy sheriffs and one constable actively serving in the village; has one night watchman with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. George F. Minto, president; Charles Steidle, clerk; John Lockwood, marshal.

MILFORD—Population, 1,108; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$18,000; has one

police officer; entire expense of police force in 1899 \$50; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department, consisting of 40 men, who receive no pay; chief, Elmer Wyckoff, salary \$20 per year; has a hand engine; value of the property belonging to the department \$1,000. Has village marshal who receives \$475 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. W. Crippen, president; F. B. Hatch, clerk; Daniel Taylor, marshal.

MILLINGTON—Population, 638; has a village hall, value \$1,000; in 1900 expended \$1,500 for public improvements; village indebtedness \$150; has one police officer; entire expense of police force in 1899 \$65; general business same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department but has a hand engine; value of property belonging to the department \$1,400. Has a village marshal who receives \$40 per year and statutory fees; has two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. George W. Rohrer, president; Daniel McLean, clerk; A. Robinson, marshal.

MINDEN—Population, 408; has a village hall, value \$2,000; in 1900 expended \$1,500 for public improvements; has no village indebtedness; has one police officer; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.50. Has no organized fire department but has \$500 worth of property belonging to the department. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Charles E. Ross, president; F. O. Hetfield, clerk; George Mackay, marshal.

MONTAGUE—Population, 998; has a village hall, value \$5,000; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force for 1899 \$500; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.50. Has a volunteer fire department, consisting of 12 men who receive 50 cents per hour at fires, chief receives same pay as others; chief, W. F. Castleman; has a steam fire engine; value of property belonging to the department \$7,150. Has a village marshal who receives \$480 per year and statutory fees; has four constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. T. McKinstry, president; Bat Whelan, clerk; George Bergeon, marshal.

MORENCI—Population, 1,334; has a village hall, value \$8,000; in 1900 expended \$500 for public improvements; has no village indebtedness; has two police officers including the marshal; entire expense of po-

lice force in 1899, \$100; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has a volunteer fire department, consisting of 84 men who receive 50 cts. each per month, and 12½ cts. per hour at fires; chief, John Warner, salary \$15 per year; has hand engine; value of property belonging to the department \$4,000. Has a village marshal who receives \$75 per year and statutory fees; and one other regular man who receives fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. William W. Crabbs, president; Burton L. Hart, clerk; Daniel Staninger, marshal.

MORLEY—Population, 334; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$30; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, number of men not given; chief, J. E. Thurkow; chief and men receive no pay; has a hand engine; value of property belonging to the department \$500. Has a village marshal who receives statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. E. Thurkow, president; F. S. Hunter, clerk; W. L. Lewis, marshal.

MORRICE—Population, 476; has a village hall, value \$600; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; expense of police force in 1899 not given; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department but has hand engine; value of property belonging to the department \$700. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Robert B. Craig, president; C. E. Jones, clerk; John McMahon, marshal.

MT. MORRIS—Population, 1,470; has a village hall, value \$1,000; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$100; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of six men who receive \$1.00 per fire; chief, J. H. Bement, salary \$10 per year; has a hand fire engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$75 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. George Hart, president; A. L. Adams, clerk; Joe Vermette, marshal.

MUNISING—Population, 2,014; has a village hall, value \$3,000; in 1900 expended \$2,500 for public improvements; village indebtedness \$25,000; has two police officers including the marshal; entire expense

of police force in 1899, \$1,500; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.75; for man and team \$4.00. Has a volunteer fire department consisting of 12 men who are paid by the hour; chief, E. P. Kling; has no fire engine; value of property belonging to the department \$2,300. Has a village marshal who receives \$60 per year and statutory fees, and one other regular man who receives \$50 and fees; three deputy sheriffs and one constable actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. G. Sullivan, president; W. M. Langley, clerk; John Thornton, marshal.

MUIR—Population, 566; has a village hall, value \$3,000; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has chemical engine; value of property belonging to the department \$300. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. A. Stoddard, president; George Bennett, clerk; O. E. Huff, marshal.

MUSKEGON HEIGHTS—Population, 1,012; has no village hall; in 1900 expended \$800 for public improvements; village indebtedness \$3,922; has one police officer; entire expense of police force in 1899, \$240; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$240 per year and statutory fees; has a village lockup in which no prisoners were confined on the first day of May, 1900. L. O. Hall, president; J. W. Pettibone, clerk; Frank C. Tyler, marshal.

NASHVILLE—Population, 1,164; has a village hall, value \$800; in 1900 expended \$600 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$117; general business better than in 1899; has no idle men; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 29 men who receive 25 cents per hour for actual service; L. W. Feighner, chief, salary \$10 per year; has no fire engine; value of property belonging to the department \$1,350. Has a village marshal who receives \$75 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. A. Hough, president; G. W. Gribbin, clerk; A. N. Appelmann, marshal.

NAUBINWAY—Population, 87; has a village hall, value \$200; in 1900 expended \$150 for public improvements; has no village indebtedness; has a village marshal; general business the same; has no idle men unable to obtain work; average wages paid day laborers \$1.60; for man and

team \$3.50. Has no organized fire department, but has a steam fire engine; value of property belonging to the department \$2,000. Has one sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. George R. Tucker, president; Nelson Duford, clerk; Frank Murry, marshal.

NEWAYGO—Population, 1,172; has no village hall; in 1900 expended nothing for public improvements; has \$932 village indebtedness; has two police officers; expense of police force in 1899, \$100; general business better than in 1899; has no idle men; average wages paid day laborers \$1.37; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$75 per year and statutory fees, and one other regular man besides one deputy sheriff actively serving in the village; has no village lockup. George Luton, president; O. W. Haney, clerk; James C. Callender, marshal.

NEW BALTIMORE—Population, 922; has a village hall, value \$2,000; in 1900 expended \$1,500 for public improvements; village indebtedness \$1,100; has one police officer; general business the same; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 20 men; R. Friday, chief, no salary; has a hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$75 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which two prisoners were confined on the first day of May, 1900. A. F. Reinecke, president; R. Friday, clerk; Alfred H. Ashley, marshal.

NEWBERRY—Population, 1,421; has a village hall, value \$2,000; in 1900 expended \$8,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$650; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.65; for man and team \$4.00. Has a volunteer fire department, consisting of 17 men, who are paid for actual services; chief D. E. Hartwick, salary \$50; has no fire engine; value of property belonging to the department \$500. Has a village marshal who receives \$600 per year and statutory fees; has one constable actively serving in the village; has no village lockup. James Somerville, president; J. F. Harper, clerk; R. J. McDonald, marshal.

NEW BOSTON—Has no village officers.

NEW BUFFALO—Population, 629; has a village hall, value \$600; in 1900 expended \$300 for public improvements; has no village indebtedness; has two police officers including the marshal; entire expense of police force in 1899, \$40; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 20 men, who receive no pay; has a hand engine; value of property belonging to the department \$600. Has a village marshal who receives \$50 per

year and statutory fees, and one other regular man; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. H. Schultz, president; Carl J. Schultz, clerk; F. W. Kamms, marshal.

NEW HAVEN—Population, 489; has no village hall; in 1900 expended \$2,500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899 \$44; general business the same; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.00. Has no organized fire department, but has a hand engine, value \$300. Has a village marshal who receives \$20 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which one prisoner was confined on the first day of May, 1900. Edgar B. Harris, president; James E. Hull, clerk; Chas. T. Cairns, marshal.

NORTH ADAMS—Population, 422; has a village hall, value \$600; in 1900 expended \$200 for public improvements; village indebtedness \$100; has one police officer; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has a hand engine, value \$250. Has a village marshal who receives statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. U. H. Fillio, president; George Kinney, clerk; J. W. Losey, marshal.

NORTH BRANCH—Population, 654; has a village hall, value \$500; in 1900 expended \$1,000 for public improvements; village indebtedness \$400; has one police officer; entire expense of police force in 1899 \$100; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 60 men; chief, Daniel Hollinger; has a hand engine; value of property belonging to the department \$2,500. Has a village marshal who receives \$75 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. H. Vandecar, president; A. C. Galbraith, clerk; Miles Finkle, marshal.

NORTHVILLE—Population, 1,755; has a village hall, value \$1,500; in 1900 expended \$5,500 for public improvements; village indebtedness, \$68,000; has one police officer; entire expense of police force in 1899, \$75; general business the same; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department, consisting of 30 men, who receive 30 cents per hour for actual service; chief, A. M. Whitehead, same pay as men; has chemical engine; value of property belonging to the department \$2,000. Has a village marshal, who receives \$75 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup, in which no prisoners were confined on the

first day of May, 1900. Thomas B. Henry, president; M. S. Nichols, clerk; W. L. Tinham, marshal.

OAKLEY—Population, 231; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$25; general business better than in 1899; has no idle men; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department and no fire apparatus. Has a village marshal, who receives \$50 per year and statutory fees; has one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. John C. Drake, president; Elmer G. Downer, clerk; J. Chamberlin, marshal.

OLIVET—Population, 800; has no village hall; in 1900 expended \$700 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$25; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 36 men, who receive 25 cents per hour for actual service; chief, C. M. Bercher, salary 50 cents per hour; has a hand engine; value of property belonging to the department \$1,000. Has a village marshal, who receives \$25 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. K. D. Keyes, president; J. A. Downer, clerk; E. M. Sloan, marshal.

ONEKAMA—Population, 274; has no village hall; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$20; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal, who receives \$10 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. A. T. Richmond, president; W. H. Scott, clerk; S. Graham, marshal.

ONAWAY—Population, 1,204; has a village hall, value \$300; in 1900 expended \$2,000 for public improvements; village indebtedness, \$150; has one police officer; entire expense of police force in 1899, \$25; general business better; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal, who receives \$25 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. P. H. Mahoney, president; J. E. Spencer, clerk; John Bannatyne, marshal.

ONTONAGON—Population, 1,267; has no village hall; in 1900 expended \$3,000 for public improvements; village indebtedness, \$40,000; has one police officer; entire expense of police force in 1899, \$75; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.87; for man and team \$4.00. Has a volunteer fire department consisting of 36 men, who receive no pay; chief, Dan Weir; has steam engine; value of property belonging to the department \$5,000. Has a village marshal, who receives \$540 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. John Hawley, president; G. W. Schock, clerk; O. Ganther, marshal.

ORION—Population, 756; has no village hall; in 1900 expended \$1,000 for public improvements; village indebtedness, \$465; has one police officer; entire expense of police force in 1899, \$56; general business better; has no idle men unable to obtain work; average wages paid day laborers \$1.40; for man and team \$3.00. Has no organized fire department, but has a hand engine; value of property belonging to the department \$1,000. Has a village marshal, who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. Joseph P. Coon, president; C. M. Stanaback, clerk; O. H. P. Green, marshal.

OSCODA—Population, 1,109; has no village hall; in 1900 expended \$200; village indebtedness, \$500; has one police officer; entire expense of police force in 1899, \$480; general business better; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department consisting of eight men, who receive \$2.00 per fire; Christian Yockey, chief; has no fire engine, but has property worth \$2,000. Has a village marshal, who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has no village lockup. Edwin W. Ely, president; Chas. S. Henniger, clerk; Lew Henniger, marshal.

OTISVILLE—Population, 291; has a village hall, value \$250; in 1900 expended nothing for public improvements; village indebtedness, \$150; has one police officer; entire expense of police force in 1899, \$50; general business not as good as in 1899; has some idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has a volunteer fire department consisting of 13 men, who receive no pay; chief, B. Cushman; has hand engine; value of property belonging to the department \$550. Has a village marshal, who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. William Mileban, president; E. H. Alexander, clerk; B. Cushman, marshal.

OTSEGO—Population, 2,073; has a village hall, value \$2,500; in 1900 expended \$1,000 for public improvements; village indebtedness \$6,000;

has two police officers, including the marshal; entire expense of police force in 1899, \$475; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 75 men, who receive no pay; chief, E. R. Conrad; has no fire engine; value of property belonging to the department \$2,000. Has a village marshal, who receives \$300 per year and statutory fees, and one other regular man; one deputy sheriff and four constables actively serving in the village; has one night-watch with police power; has a village lockup, in which one prisoner was confined on the first day of May, 1900. Charles E. Stuck, president; E. J. Rose, clerk; Joseph Stratton, marshal.

OTTER LAKE—Population, 212; has no village hall; in 1900 expended \$300 for public improvements; no village indebtedness; has one police officer; general business better; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.75. Has no organized fire department, but has a hand engine, value \$200. Has a village marshal, who receives \$100 per year and statutory fees; has one deputy sheriff actively serving in the village; has no village lockup. Merritt Sperry, president; James Keith, clerk; Frank Beckett, marshal.

OVID—Population, 1,293; has a village hall, value \$3,500; in 1900 expended nothing for public improvements; village indebtedness \$16,500; has two police officers, including the marshal; entire expense of police force in 1899, \$516; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers, \$1.50; for man and team \$2.50. Has a volunteer fire department consisting of 10 men, who are paid for actual services; chief, E. E. Cowan; has no property belonging to the department. Has a village marshal, who receives \$100 per year and statutory fees, and one other regular man; one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup, in which no prisoners were confined on the first day of May, 1900. W. R. Shaw, president; L. W. Vaughan, clerk; Fred Underhill, marshal.

OXFORD—Population, 1,172; has a village hall, value \$3,000; in 1900 expended \$1,000 for public improvements; village indebtedness, \$28,000; has one police officer; entire expense of police force in 1899, \$100; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.25. Has a volunteer fire department, number of men not given; chief, Hiram Kellam; has no fire engine; value of property belonging to the department \$1,000. Has a village marshal, who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. C. E. Stanton, president; C. Losey, clerk; Wallace McQueen, marshal.

PALMER—Population, 799; has no village organization.

PARMA—Population, 420; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; general business the same as in 1899; average wages paid day laborers \$1.00; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal, who receives statutory fees; has one deputy sheriff actively serving in the village; has no village lockup. S. H. Godfrey, president; S. H. Barsdale, clerk; George La Due, marshal.

PAW PAW—Population, 1,465; has a village hall, value \$1,800; in 1900 expended \$10,000 for public improvements; village indebtedness \$36,000; has two police officers, including marshal; entire expense of police force in 1899, \$1,000; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department consisting of 41 men, who receive \$50 each per year; chief, A. F. McNeil, salary \$50 per year; has a steam fire engine; value of property belonging to the department \$3,500. Has a village marshal, who receives \$480 per year and statutory fees; has one deputy sheriff and four constables actively serving in the village; has one night-watch with police power; has no village lockup. T. J. Cavanaugh, president; William H. Mason, clerk; A. T. Stevenson, marshal.

PENTWATER—Population, 1,061; has a village hall, value \$1,500; in 1900 expended nothing for public improvements; village indebtedness \$1,500; has one police officer, entire expense of police force in 1899, \$100; general business not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department consisting of 24 men, who receive 30 cents per hour for actual service; chief, George Hutchinson; has a steam fire engine; value of property belonging to the department \$6,000. Has a village marshal, who receives \$50 per year and statutory fees; has one deputy sheriff and four constables actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. D. D. Alton, president; Bert Wickham, clerk; P. H. Adams, marshal.

PERRINGTON—Population, 331; has a village hall, value \$300; in 1900 expended \$150 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$25; general business the same; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal, who receives statutory fees; has one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. J. L. Richard, president; Chas. Dodge, clerk; Thomas Holland, marshal.

PERRY—Population, 641; has no village hall; in 1900 expended \$850 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$25; general business

better; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.25. Has no organized fire department, but has a hand and chemical engine; value of property belonging to the department \$1,000. Has a village marshal, who receives \$25 per year and statutory fees; has one constable actively serving in the village; has one nightwatch with police power; has no village lockup. George D. Dunn, president; H. H. Hawley, clerk; E. I. Enring, marshal.

PETERSBURG—Population, 468; has no village hall; in 1900 expended \$1,000 for public improvements; village indebtedness \$162; has one police officer; entire expense of police force in 1899, \$850; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire engine; value of property reported by the department is only \$15. Has a village marshal, who receives statutory fees; has one deputy sheriff and three constables actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. T. H. McDonald, president; G. R. Lantz, clerk; E. J. Ball, marshal.

PEWAMO—Population, 446; has a village hall, value \$500; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$600. Has a village marshal, who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. M. A. Britton, president; E. McLain, clerk; C. E. Graves, marshal.

PIERSON—Population, 215; has no village hall; in 1900 expended \$100 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$6.00; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department and no fire apparatus. Has a village marshal, who receives \$6.00 per year and statutory fees; has one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. M. H. Holcomb, president; G. W. Newcomb, clerk; Hiram Smith, Jr., marshal.

PINCKNEY—Population, 500; has a village hall, value \$300; in 1900 expended \$500 for public improvements; village indebtedness \$200; has one police officer; entire expense of police force in 1899, \$50; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal, who receives \$20 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village

lockup, in which one prisoner was confined on the first day of May, 1900. Alex. McIntyre, president; R. H. Teeple, clerk; F. Moran, marshal.

PINCONNING—Population, 729; has a village hall, value \$1,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$7,500; has two police officers, including the marshal; entire expense of police force in 1899, \$200; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.50. Has no organized fire department and no engine; value of property belonging to the department \$3,000. Has a village marshal, who receives \$25 per year and statutory fees, and one other regular man, besides one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has a village lockup, in which no prisoners were confined on the first day of May, 1900. Edward Jennings, president; H. C. Manfield, clerk; Chas. A. Johnson, marshal.

PLAINWELL—Population, 1,318; has a village hall, value \$400; in 1900 expended \$3,000 for public improvements; has no village indebtedness; has two police officers, including the marshal; entire expense of police force in 1899, \$600; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$1.75. Has a volunteer fire department, number of men not given; chief, D. E. White, salary \$25 per year; has no fire engine; value of property belonging to the department \$600. Has a village marshal, who receives \$600 per year and statutory fees; also one regular man, one deputy sheriff and three constables actively serving in the village; has one night-watch with police power; has a village lockup, in which no prisoners were confined on the first day of May, 1900. F. M. Storms, president; F. F. Patterson, clerk; E. K. Root, marshal.

PLYMOUTH—Population, 1,474; has a village hall, value \$5,000; in 1900 expended \$2,000 for public improvements; village indebtedness \$35,000; has one police officer; entire expense of police force in 1899, \$125; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department, number of men not given; chief, George W. Hunter, no salary; has no fire engine; value of property belonging to the department \$1,500. Has a village marshal, who receives \$100 per year and statutory fees; has four constables actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. George A. Starkweather, president; H. J. Baker, clerk; M. R. Weeks, marshal.

PORT AUSTIN—Population, 507; has a village hall, value \$500; in 1900 expended nothing for public improvements; village indebtedness \$250; has one police officer; entire expense of police force in 1899, \$75; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a

village marshal, who receives \$60 per year and statutory fees; has one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. J. R. Learned, president; G. S. Newberry, clerk; John Van Natter, marshal.

PORT HOPE—Population, 319; has no village hall; in 1900 expended \$250 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal, who receives \$50 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. William Stafford, president; James H. Armlin, clerk; M. P. Weatherhead, marshal.

PORTLAND—Population, 1,874; has a village hall, value \$1,000; in 1900 expended \$8,000 for public improvements; village indebtedness \$38,500; has one police officer; entire expense of police force in 1899, \$200; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a paid fire department, consisting of 12 full-time men and 10 part-time men; full-time men receive \$10 per month, part-time men 50 cents per hour for actual service; chief, M. J. Whitney, salary \$10 per year; has no fire engine; value of property belonging to the department \$1,500. Has a village marshal, who receives \$150 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has one night-watch with police power; has a village lockup, in which no prisoners were confined on the first day of May, 1900. L. F. Cutcheon, president; F. C. Hathaway, clerk; Oscar Rosselle, marshal.

PORT SANILAC—Population, 314; has no village hall; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$60; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.25. Has no organized fire department and no engine; value of property belonging to the department \$150. Has a village marshal, who receives \$60 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup, in which no prisoners were confined on the first day of May, 1900. Fred Raymond, president; W. A. Ramsey, clerk; William J. Ward, marshal.

POTTERVILLE—Population, 495; has no village hall; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police officer; expense of police force in 1899, \$30; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.25. Has no organized fire department and no fire engine; value of property belonging to the department \$100. Has a village marshal who receives \$25

per year and statutory fees; has one deputy sheriff actively serving in the village; has no village lockup. Hiram F. Rossman, president; William J. How, clerk; W. H. Lytle, marshal.

QUINCY—Population, 1,563; has a village hall, value \$5,000; in 1900 expended nothing for public improvements; village indebtedness \$20,000; has two police officers including the marshal; expense of police force in 1899 not given; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.35; for man and team \$2.75. Has a volunteer fire department, consisting of 60 men; chief, M. S. Segur; chief and men receive no pay; has a hand engine; value of property belonging to the department \$800. Has a village marshal who receives statutory fees; has one deputy sheriff and three constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. J. Rawson, president; William L. Knapp, clerk; Green Arnold, marshal.

READING—Population, 1,096; has a village hall, value \$2,000; in 1900 expended \$25,000 for public improvements; village indebtedness \$20,000; has one police officer; entire expense of police force in 1899, \$75; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department, but has a hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$50 per year and statutory fees; has two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. G. Mallery, president; G. E. Stone, clerk; George Kesselring, marshal.

RED JACKET—Population, 4,668; has a village hall, value \$75,000; in 1900 expended \$15,000 for public improvements; village indebtedness \$50,000; has four police officers including the marshal; entire expense of police force in 1899, \$3,500; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.75; for man and team \$4.00. Has paid fire department, consisting of four full time men and fifteen part time men; full time men receive \$60 per month; part time men receive an average salary of \$7.50 per month each; chief, Chas. Schenk, salary \$150 per year; has two steam engines; value of property belonging to the department \$18,000. Has a village marshal who receives \$1,020 per year and statutory fees; has two deputy sheriffs and two constables actively serving in the village; has three night-watchers with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. John R. Ryan, president; A. J. March, clerk; August Beck, marshal.

REED CITY—Population, 2,051; has a village hall, value \$8,000; in 1900 expended \$2,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$600; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and

team \$3.00. Has a volunteer fire department, number of men not given; chief, M. Callegan, no salary; has no fire engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$480 per year and statutory fees; has two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. Amos Rosenberg, president; A. L. Hamilton, clerk; J. C. Hamilton, marshal.

REESE—Population, 416; has no village hall; in 1900 expended \$700 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$60; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$50 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Henry Monger, president; Clark Randall, clerk; D. P. McDonald, marshal.

RICHLAND—Population, 312; has no village hall; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives statutory fees; has two constables actively serving in the village; has no village lockup. M. A. Snow, president; A. J. Butler, clerk; J. W. Hanna, marshal.

RICHMOND—Population, 1,133; has a village hall, value \$3,000; in 1900 expended nothing for public improvements; village indebtedness \$28,000; has one police officer; entire expense of police force in 1899, \$100; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, number of men not given; chief, Frank Fanning; chief and men receive no pay; has a hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$72 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. H. Acker, president; F. W. Burke, clerk, William Fenton, marshal.

ROCHESTER—Population, 1,535; has a village hall, value \$1,500; in 1900 expended \$5,000 for public improvements; village indebtedness \$20,000; has one police officer; entire expense of police force in 1899, \$100; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department, consisting of 38 men; chief, R. J. Bennett; chief and men receive no pay; has no fire engine; value of property belonging to the department \$700. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff and

one constable actively serving in the village; has a village lockup in which three prisoners were confined on the first day of May, 1900. George Newberry, president; C. E. Hadden, clerk; Richard Bennett, marshal.

ROCKFORD—Population, 711; has a village hall, value \$1,000; in 1900 expended \$500 for public improvements; village indebtedness \$10,000; has three police officers including the marshal; entire expense of police force in 1899, \$25; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 19 men, who receive \$1.00 per fire; chief, R. H. Dockery, no salary; has no fire engine; value of property belonging to the department \$625. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. F. Hessler, president; H. E. Cowdin, clerk; George W. Brantner, marshal.

ROGERS—Population, 544; has no village hall; in 1900 expended \$200 for public improvements; village indebtedness \$350; has one police officer; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$35 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has no village lockup. Julius E. Gumm, president; Charles Platz, clerk; M. C. Kuhlman, marshal.

ROMEO—Population, 1,580; has a village hall, value \$2,500; in 1900 expended \$2,500 for public improvements; village indebtedness \$33,000; has one police officer; entire expense of police force in 1899, \$75; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department, consisting of 35 men, who receive 25 cents per hour for practice and 50 cents per hour for fires; chief, Peter Erb, no salary; has a hand engine; value of property belonging to the department \$2,500. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff and four constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Dwight N. Lowell, president; B. N. Seaman, clerk; Charles Cassel, marshal.

ROSCOMMON—Population, 465; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has two police officers including marshal; entire expense of police force in 1899, \$60; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire engine; value of property belonging to the department \$1,500. Has no village

marshal; has one deputy sheriff actively serving in the village; has no village lockup; J. B. Kiely, president; J. L. Smith, clerk.

ROYAL OAK—Population, 468; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.50. Has no organized fire department, and no fire apparatus. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. Charles Allen, president; Josiah Heavener, clerk; Alexander Lewless, marshal.

SALINE—Population, 584; has a village hall, value \$2,000; in 1900 expended \$1,200 for public improvements; has no village indebtedness; has two police officers including the marshal; entire expense of police force in 1899, \$60; general business better than in 1899; has no idle men; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 16 men, who receive \$5.00 per year each; chief, Samuel Josenhaus, salary \$10 per year; has a hand fire engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$60 per year and statutory fees; has two deputy sheriffs and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. G. C. Townsend, president; George R. Lutz, clerk; Charles H. Carven, marshal.

SAND LAKE—Population, 326; has no village hall; in 1900 expended \$250 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$24 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. B. Jones, president; C. B. LaClear, clerk; A. D. Thorp, marshal.

SANILAC CENTER—Population, 578; has a village hall, value \$400; in 1900 expended nothing for public improvements; village indebtedness \$1,085; has one police officer; entire expense of police force in 1899 \$97; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$400. Has a village marshal who receives \$30 per year and statutory fees; has two deputy sheriffs and two constables actively serving in the village; has no village lockup. W. H. Burgess, president; F. J. Benedict, clerk; J. M. Caughell, marshal.

SARANAC—Population, 768; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one

police officer; entire expense of police force in 1899, \$50; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. W. Braley, president; G. V. Payne, clerk; H. T. Hubbell, marshal.

SAUGATUCK—Population, 707; has a village hall, value \$1,400; in 1900 expended \$3,000 for public improvements; has no village indebtedness; has four police officers including the marshal; entire expense of police force in 1899, \$75; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department but has a hand engine; value of property belonging to the department \$2,500. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. H. Pear, president; E. L. Leland, clerk; John Hirner, marshal.

SCHOOLCRAFT—Population, 859; has a village hall, value \$1,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$3,000; has one police officer; entire expense of police force in 1899, \$200; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$500. Has a village marshal who receives \$480 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Charles T. Duncan, president; J. M. Budrow, clerk; Nathaniel Burch, marshal.

SCOTTVILLE—Population, 554; has a village hall, value \$350; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$30; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 20 men; chief, T. R. Reader; chief and men receive no pay; has no fire engine; value of property belonging to the department \$500. Has a village marshal who receives \$60 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. C. W. McPhail, president; J. H. Trall, clerk; Andrew Upper, marshal.

SEBEWAING—Population, 1,243; has a village hall, value \$500; in 1900 expended \$2,000 for public improvements; has no village indebtedness; has three police officers including marshal; entire expense of police force in 1900, \$400; general business the same as in 1899; has no

idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department consisting of 50 men who receive \$1.00 per fire; chief, J. E. Allen, no salary; has steam, hand and chemical engines; value of property belonging to the department \$5,000. Has a village marshal who receives \$400 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. John Reidel, president; C. F. Bach, clerk; Henry Fliegel, marshal.

SHELBY—Population, 1,081; has a village hall, value \$3,500; in 1900 expended \$1,000 for public improvements; village indebtedness, \$25,872; has three police officers; entire expense of police force in 1899, \$154; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 25 men, who receive 35 cents per hour; chief, C. DeBalt, no salary; has steam engine; value of property belonging to the department \$2,000. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. George E. Dewey, president; Clayton E. Ellis, clerk; W. M. Hart, marshal.

SHEPHERD—Population, 635; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$85; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.25. Has no organized fire department but has a chemical fire engine; value of property belonging to the department \$250. Has a village marshal who receives \$75 per year and statutory fees; has two deputy sheriffs actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. E. Gruber, president; F. A. Worthington, clerk; Miles Axtel, marshal.

SHERIDAN—Population, 437; has a village hall, value \$600; in 1900 expended nothing for public improvements; has village indebtedness \$1,000; has one police officer; entire expense of police force in 1899, \$32; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has a volunteer fire department, consisting of eight men, who receive 15 cents per hour for actual service; chief, William Hall; no salary; has a steam engine; value of property belonging to the department \$700. Has a village marshal who receives \$20 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. L. Stearns, president; C. E. Dell, clerk; John T. Ford, marshal.

SHERMAN—Population, 427; has no village hall; in 1900 expended nothing for public improvements; has no village indebtedness; has one

police officer; entire expense of police force in 1899, \$100; general business better; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department but has hand engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$100 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. J. Claggett, president; V. R. Sherman, clerk; W. R. Avery, marshal.

SHERWOOD—Population, 366; has no village hall; in 1900 expended \$300 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$20; general business the same as in 1899; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department and no fire engine; value of property belonging to the department \$25. Has a village marshal who receives \$20 per year and statutory fees; has two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. M. Daniels, president; E. S. Easton, clerk; John W. Smith, marshal.

SOUTH FRANKFORT—Population, 639; has no village hall; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$48; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$25 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. S. Perry, president; William R. Thomas, clerk; Mark Gudemoos, marshal.

SOUTH HAVEN—Population, 4,009; has a village hall; value \$3,600; in 1900 expended \$20,000 for public improvements; village indebtedness \$60,000; has one police officer; entire expense of police force in 1899, \$785; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.75. Has a volunteer fire department, consisting of 33 men, who receive \$1.00 per fire; chief, E. W. Edgerton, salary \$25 per year; has no fire engine; value of property belonging to the department \$3,500. Has a village marshal who receives \$420 per year and statutory fees; has one deputy sheriff and four constables actively serving in the village; has one night-watch with police power; has a village lockup in which two prisoners were confined on the first day of May, 1900. George W. Cain, president; A. Ryall, clerk; R. R. Gleason, marshal.

SOUTH LYON—Population, 657; has a village hall, value \$2,000; in 1900 expended \$2,000 for public improvements; village indebtedness \$2,000; has one police officer; entire expense of police force in 1899, \$27; general business the same as in 1899; has no idle men unable to obtain

work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 45 men; chief, C. Walter; chief and men receive 20 cents per hour; has hand engine; value of property belonging to the department \$2,500. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. H. Kalmbach, president; T. Glenan, clerk; James Bridson, marshal.

SPARTA—Population, 1,126; has no village hall; in 1900 expended \$1,500 for public improvements; village indebtedness \$9,000; has one police officer; entire expense of police force in 1899, \$10; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 23 men, who receive 50 cents for false alarms and \$1.00 per fire; chief, William Carr; no salary; has no fire engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$10 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has no village lockup. Wallace Burtch, president; S. W. Haines, clerk; E. A. Harris, marshal.

SPRING LAKE—Population, 696; has a village hall, value \$3,000; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department, consisting of 13 men, who receive \$15 each per year; chief, John Gurling, salary \$35 per year; has steam, hand, and chemical fire engines; value of property belonging to the department \$2,500. Has a village marshal who receives \$50 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which five prisoners were confined on the first day of May, 1900. Aloys Bilz, president; C. M. Kay, clerk; Thomas Hammond, marshal.

SPRINGPORT—Population, 559; has a village hall, value \$1,500; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has a volunteer fire department, consisting of 30 men; chief, T. D. Wiseloge; chief and men receive no pay; has steam engine; value of property belonging to the department \$1,500. Has a village marshal who receives statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. H. J. Cartright, president; J. E. Zupp, clerk; T. D. Wiseloge, marshal.

STAMBAUGH—Population, 695; has no village hall; in 1900 expended \$2,000 for public improvements; has no village indebtedness;

has one police officer; entire expense of police force in 1899, \$100; general business better than in 1899; average wages paid day laborers \$2.00; for man and team \$4.50. Has no organized fire department and no fire engine; value of property belonging to the department \$1,000. Has a village marshal who receives statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. O. J. Lindwall, president; F. C. Vilas, clerk; Orace Moore, marshal.

STANDISH—Population, 829; has no village hall; in 1900 expended \$1,500 for public improvements; village indebtedness \$800; has one police officer; entire expense of police force in 1899, \$60; general business not as good as in 1899; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 18 men, who receive 50 cents per fire; chief, D. C. Beaton; salary \$1.00 per fire; has no fire engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$180 per year and statutory fees; has one constable actively serving in the village; has no village lockup. J. T. Cummings, president; E. M. Knight, clerk; W. N. Pomeroy, marshal.

ST. CHARLES—Population, 1,317; has a village hall, value \$2,000; in 1900 expended \$4,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$750; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department, number of men not given; chief, J. E. Brownell; salary \$25 per year; has hand engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$420 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. H. McEwen, president; John Lafferty, clerk; Galor Lytle, marshal.

ST. JOHNS—Population, 3,388; has a village hall, value \$2,500; in 1900 expended \$2,000 for public improvements; village indebtedness \$116,000; has three police officers including the marshal; entire expense of police force in 1899, \$560; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department, number of men not given; chief, William Crich; no salary; has steam engine; value of property belonging to the department \$5,000. Has a village marshal who receives \$600 per year and statutory fees; has four deputy sheriffs and four constables actively serving in the village; has one night-watch with police power; has no village lockup. Henry Palmer, president; M. McDonald, clerk; J. W. Keeney, marshal.

STEPHENSON—Population, 395; has no village hall; in 1900 expended \$800 for public improvements; has no village indebtedness; has two police officers including the marshal; general business better than

in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department, but has hand engine; value of property belonging to the department \$2,000. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Dewitt Brown, president; William Elder, clerk; G. W. Dean, marshal.

STEVENSVILLE—Population, 250; has no village hall; in 1900 expended nothing for public improvements; village indebtedness \$54; has one police officer; entire expense of police force in 1899, \$150; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers, \$1.12; for man and team, \$3.00. Has no organized fire department, but has hand engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$144 per year and statutory fees; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. G. Mielke, president; J. Schneck, clerk; John Stevenson, marshal.

STOCKBRIDGE—Population, 677; has a village hall, value \$5,000; in 1900 expended \$700 for public improvements; village indebtedness \$150; has one police officer; entire expense of police force in 1899, \$35; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, and no fire apparatus. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. G. Marshall, president; W. E. Brown, clerk; George J. Burgett, marshal.

SUNFIELD—Population, 451; has no village hall; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$300; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has chemical engine; value of property belonging to the department \$200. Has a village marshal who receives \$312 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. H. Bera, president; R. M. Bascom, clerk; Warren West, marshal.

SUTTONS BAY—Population, 398; has no village hall; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$35; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department, consisting of eight men; chief, Jacob Ruffi; chief and men receive no pay; has chemical engine; value of property belonging to the department \$100. Has a village marshal who receives \$35

per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. L. E. Bahle, president; S. O. Cooley, clerk; Chas. E. Steimel, marshal.

TECUMSEH—Population, 2,400; has a village hall, value \$3,000; in 1900 expended \$1,000 for public improvements; village indebtedness \$30,000; has three police officers including the marshal; entire expense of police force in 1899, \$362; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department, consisting of 35 men, who receive no pay; chief, C. E. Williams; salary \$75 per year; has steam engine; value of property belonging to the department \$4,600. Has a village marshal who receives \$150 per year and statutory fees; has one deputy sheriff and four constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. Rudolph A. Heesen, president; D. H. C. Bowen, clerk; H. W. Stevens, marshal.

TEKONSHA—Population, 573; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$29; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire engine; value of property belonging to the department not given. Has a village marshal who receives statutory fees; has a village lockup in which no prisoners were confined on the first day of May, 1900. S. H. Clizbe, president; B. G. Doolittle, clerk; John M. Smith, marshal.

THOMPSONVILLE—Population, 893; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$5,000; has one police officer; entire expense of police force in 1899, \$100; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.50. Has a volunteer fire department, number of men not given; chief, E. G. Fisher; no salary; has no fire engine; value of property belonging to the department \$500. Has a village marshal who receives \$72 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. M. Darmanth, president; M. G. Paul, clerk; Frank Woods, marshal.

THREE OAKS—Population, 994; has no village hall; in 1900 expended \$2,000 for public improvements; village indebtedness \$10,000; has four police officers, including the marshal; entire expense of police force in 1899, \$500; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department, consisting of 30 men, who receive no pay; chief, William Hollett; salary \$15 per year; has a

hand engine; value of property belonging to the department \$500. Has a village marshal who receives \$75 per year and statutory fees; also three other police officers; one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. E. K. Warren, president; J. E. McKie, clerk; Samuel Gable, marshal.

TRENTON—Population, 1,167; has no village hall; in 1900 expended \$1,500 for public improvements; village indebtedness \$8,000; has one police officer; entire expense of police force in 1899, \$200; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.35; for man and team \$3.00. Has a volunteer fire department, consisting of 27 men who receive 50 cents for first hour of fire and 30 cents per hour thereafter; chief, G. D. Jones; no salary; has no fire engine; value of property belonging to the department \$800. Has a village marshal who receives \$200 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. C. Armstrong, president; G. D. Jones, clerk; Patrick Mahady, marshal.

TUSTIN—Population, 303; has a village hall, value \$400; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$50; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$20 per year and statutory fees; has one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Harlon Cole, president; C. M. Estes, clerk; J. F. Emory, Jr., marshal.

UBLY—Population, 432; has a village hall, value \$350; in 1900 expended \$900 for public improvements; has one police officer; entire expense of police force in 1899, \$60; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department and no fire engine; value of property belonging to the department only reported \$12. Has a village marshal who receives \$60 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Edward Baskin, president; Edward Laing, clerk; J. E. Ferguson, marshal.

UNION CITY—Population, 1,228; has a village hall, value \$3,000; in 1900 expended \$11,000 for public improvements; village indebtedness \$26,000; has six police officers including the marshal; entire expense of police force in 1899, \$125; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has a volunteer fire department, consisting of

14 men, who are paid for actual services; chief, W. H. Rowe; no salary; has a steam engine; value of property belonging to the department \$4,000. Has a village marshal who receives \$75 per year and statutory fees; also five other men on force, besides one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. G. K. Whiting, president; T. F. Robinson, clerk; J. F. Hartford, marshal.

UNIONVILLE—Population, 427; has a village hall, value \$300; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$15; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department, but has a hand engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. B. Town, president; O. D. Hill, clerk; Lewis Sawden, marshal.

UTICA—Population, 562; has no village hall; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire engine; value of property belonging to the department not given. Has a village marshal who receives \$50 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. H. Marvin, president; J. F. Hollister, clerk; Elmer J. Terry, marshal.

VANDALIA—Population, 407; has a village hall, value \$1,000; in 1900 expended nothing for public improvements; village indebtedness \$600; has one police officer; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$10 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. L. B. James, president; F. M. Dodge, clerk; Edwin Ely, marshal.

VASSAR—Population, 1,832; has a village hall, value \$1,000; in 1900 expended \$2,500 for public improvements; village indebtedness \$30,000; has two police officers including the marshal; entire expense of police force in 1899, \$900; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.75. Has a volunteer fire department consisting of 12 men who are paid \$2.00 per fire; chief, J. A. Frazer, salary \$25 per year; has no fire engine; value of property belonging to the department \$1,800. Has a village marshal who receives \$450 per year and statutory fees; also one regular man who receives \$450 per year; one deputy sheriff and

three constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. D. LeValley, president; C. W. Farnum, clerk; A. D. McIntyre, marshal.

VERMONTVILLE—Population, 684; has a village hall, value \$5,000; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$360; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$2.50. Has no organized fire department, but has a chemical engine; value of property belonging to the department \$500. Has a village marshal who receives \$30 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. C. Alsover, president; D. R. Finley, clerk; A. M. Briggs, marshal.

VERNON—Population, 536; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$4,000; has one police officer; entire expense of police force in 1899, \$25; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire engine; value of property belonging to the department \$200. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. L. W. Van Alstine, president; F. C. Churchill, clerk; John Reynolds, marshal.

VICKSBURG—Population, 972; has no village hall; in 1900 expended \$500 for public improvements; village indebtedness \$14,500; has one police officer; entire expense of police force in 1899, \$520; general business not as good as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 40 men who are paid for actual service; chief, Manfred Hill, no salary; has no fire engine; value of property belonging to the department not given. Has a village marshal who receives \$192 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. H. J. Daniels, president; C. L. Keep, clerk; A. Brink Platt, marshal.

WAKEFIELD—Population, 1,191; has no village hall; in 1900 expended \$3,000 for public improvements; village indebtedness \$1,100; has one police officer; entire expense of police force in 1899, \$720; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$2.00; for man and team \$5.00. Has no organized fire department, but steam fire engine; value of property belonging to the department \$5,000. Has a village marshal who re-

ceives \$720 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. J. W. Bedell, president; Thomas Mellow, clerk; A. Selsemeyer, marshal.

WARREN—Population, 350; has no village hall; in 1900 expended \$600 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$25; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Chas. Gerloch, president; Martin Denne, clerk; Anthony Schlaf, marshal.

WATERVLIET—Population, 717; has no village hall; in 1900 expended \$500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$400; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire engine; value of property belonging to the department \$1,700. Has a village marshal who receives \$456 per year and statutory fees; has two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. M. Sterner, president; L. D. Case, clerk; J. T. Eagan, marshal.

WAYLAND—Population, 619; has a village hall, value \$1,000; in 1900 expended nothing for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$125; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.00; for man and team \$2.00. Has no organized fire department, but has a hand engine; value of property belonging to the department \$300. Has a village marshal who receives \$125 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. William Stockdale, president; G. A. Mosher, clerk; L. A. Walch, marshal.

WAYNE—Population, 1,361; has a village hall, value \$1,500; in 1900 expended \$1,500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$133; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$75 per year and statutory fees; has two deputy sheriffs and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. James R. Hosie, president; Clarence Carpenter, clerk; J. C. Smith, marshal.

WEBBERVILLE—Population, 346; has a village hall, value \$800; in 1900 expended \$365 for public improvements; has no village indebtedness; has one police officer; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$25 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has no village lockup. F. N. Turner, president; James Fisher, clerk; Frank McLawson, marshal.

WEST BRANCH—Population, 1,412; has a village hall, value \$200; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has no organized fire department, but has a hand engine; value of property belonging to the department \$1,800. Has a village marshal who receives statutory fees; has one deputy sheriff and one constable actively serving in the village; has no village lockup. R. H. Cooper, president; F. W. Freeman, clerk; A. K. Dollar, marshal.

WESTPHALIA—Population, 374; has a village hall, value \$600; in 1900 expended \$1,500 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$75; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 14 men who receive \$5.00 per year and 50 cents per hour for actual service; chief, John Baker, receives \$10 per year; has a hand engine; value of property belonging to the department \$500. Has a village marshal who receives \$75 per year and statutory fees; has one deputy sheriff and three constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. Philip Cook, president; Anthony Snitgen, clerk; John Baker, marshal.

WHITE CLOUD—Population, 595; has a village hall, value \$400; in 1900 expended \$300 for public improvements; has one police officer; entire expense of police force in 1899, \$480; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.50; for man and team \$3.00. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$45 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. W. A. Kuhn, president; Louis Fuller, clerk; Thomas Herron, marshal.

WHITEHALL—Population, 1,481; has a village hall, value \$1,800; in 1900 expended \$500 for public improvements; village indebtedness \$7,333; has one police officer; entire expense of police force in 1899, \$249; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has

a paid fire department consisting of two full time men and 18 part time men; full time men receive \$30 per month; part time men 50 cents per hour for actual service; chief, J. C. Haseltine, no salary; has a steam fire engine; value of property belonging to the department \$8,000. Has a village marshal who receives \$360 per year and statutory fees; has one deputy sheriff and four constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. H. H. Olsen, president; E. D. Skeels, clerk; J. C. Haseltine, marshal.

WHITE PIGEON—Population, 705; has no village hall; in 1900 expended \$1,000 for public improvements; has no village indebtedness; has one police officer; entire expense of police force in 1899, \$360; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department consisting of 20 men who receive 25 cents per hour for actual service; chief, C. Schwartz, no salary; has chemical engine; value of property belonging to the department \$1,500. Has a village marshal who receives \$360 per year and statutory fees; has one deputy sheriff actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. A. Wickett, president; John Dellinger, marshal.

WILLIAMSTON—Population, 1,113; has a village hall, value \$2,500; in 1900 expended \$1,500 for public improvements; village indebtedness \$600; has one police officer; entire expense of police force in 1899, \$150; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 13 men; chief, Albert Rockwell; chief and men receive \$2.00 per fire each; has steam engine; value of property belonging to the department \$4,000. Has a village marshal who receives \$50 per month and statutory fees; has one deputy sheriff and four constables actively serving in the village; has one night-watch with police power; has a village lockup in which no prisoners were confined on the first day of May, 1900. M. Coad, president; S. P. Morrison, clerk; G. W. Butters, marshal.

WOODLAND—Population, 319; has a village hall, value \$400; in 1900 expended \$500 for public improvements; village indebtedness \$100; has one police officer; entire expense of police force in 1899, \$75; general business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has no organized fire department and no fire apparatus. Has a village marshal who receives \$72 per year and statutory fees; has three constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. F. F. Hilbert, president; J. F. Hofer, clerk; D. A. Miller, marshal.

YALE—Population, 1,129; has a village hall, value \$600; in 1900 expended \$2,000 for public improvements; village indebtedness \$20,000; has one police officer; entire expense of police force in 1899, \$150; gen-

eral business the same as in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$2.50. Has a volunteer fire department consisting of 16 men who receive \$2.00 each per fire; has no fire engine; value of property belonging to the department not given. Has a village marshal who receives \$391 per year and statutory fees; has one deputy sheriff and two constables actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. James McColl, president; E. F. Fead, clerk; A. S. Parks, marshal.

ZEELAND—Population, 1,326; has a village hall, value \$1,000; in 1900 expended nothing for public improvements; village indebtedness \$500; has one police officer; entire expense of police force in 1899, \$140; general business better than in 1899; has no idle men unable to obtain work; average wages paid day laborers \$1.25; for man and team \$3.00. Has a volunteer fire department consisting of 25 men who receive \$4.00 per year each; chief, James Cook; salary \$15 per year; has a steam engine; value of property belonging to the department \$1,000. Has a village marshal who receives \$140 per year and statutory fees; has one deputy sheriff and one constable actively serving in the village; has a village lockup in which no prisoners were confined on the first day of May, 1900. B. Kamps, president; L. W. Hartwick, clerk; William D. DePree, marshal.

DEDUCTIONS FROM THE FOREGOING VILLAGE STATISTICS.

Number of incorporated villages in the State.....	305
Number owning village halls.....	172
Number not owning village halls.....	133
Total value of village halls.....	\$480,110 00
Average value for each hall.....	2,791 33
Number expending money for public improvements in 1900.....	256
Number not expending money for improvements in 1900.....	49
Total amount of money expended.....	\$511,665 00
Average amount for each village.....	1,998 68
Number of villages having no public indebtedness.....	147
Number of villages having a public indebtedness.....	158
Total amount of public indebtedness.....	\$1,013,478 00
Average amount for each village.....	6,414 42
Number of villages having police officers.....	297
Number of villages having no police officers.....	8
Total number of police officers.....	412
Average number for each village.....	1.4
Number of villages having night-watches with police powers.....	73
Number of villages having no night-watches.....	232
Total number of night-watches.....	80
Average number for each village.....	1.1
Number of villages giving expense of police in 1899.....	257
Number of villages not giving expense of police.....	43
Total expense as given for the 257 villages.....	\$67,204 00
Average expense for each village.....	261 50

Number of villages where business is better than in 1899.....	128
Number of villages where business is the same as in 1899.....	160
Number of villages where business is worse than in 1899.....	17
Number of villages having no idle men unable to obtain work.....	295
Number of villages having idle men unable to obtain work.....	3
Number of villages not answering this question.....	7
Average daily wages paid day laborers.....	\$1 31
Average daily wages for team and driver.....	2 72
Highest wages paid day laborers, seven villages, \$2 per day.	
Highest wages paid man and team, one village, \$5 per day, and five villages, \$4.50 per day.	
Lowest wages paid day laborers, sixteen villages, \$1 per day.	
Lowest wages paid man and team, one village, \$1.75 per day, and fifteen villages, \$2 per day.	
Number of villages having organized fire departments.....	148
Number of villages not having organized fire departments.....	147
Number of departments that are volunteer.....	151
Number of departments that are paid.....	7
Number of departments that have a chief.....	158
Number paying the chief a salary.....	41
Number paying the chief no salary.....	117
Number of departments having regular men.....	8
Number of departments not having regular men.....	150
Number of regular men.....	55
Average number of regular men for each village.....	6.7
Average monthly pay of regular men.....	\$32 20
Number of villages having part time men.....	124
Number of villages having no part time men.....	34
Number of part time men.....	3,198
Average number part time men for each village.....	25.8
Number that pay men by the year.....	15
Number that pay men by the month.....	8
Number that pay men by the day.....	2
Number that pay men by the hour.....	30
Number that pay men by the time at each fire.....	33
Number that pay no stated price or salary.....	70
Number of villages having fire engines.....	157
Number of villages having no fire engine.....	148
Number of hand engines.....	102
Number of chemical engines.....	37
Number having steam engines.....	31
Total number of engines.....	170
Average number of engines for each village having engines....	1.1
Number of villages having property belonging to fire department.....	227
Number villages having no property belonging to fire department.....	78
Total value of property belonging to fire departments.....	\$355,553 00
Average for each village having property.....	1,566 32
Number of villages having a marshal.....	295
Number of villages having no marshal.....	10
Number of villages that pay marshal salary besides fees.....	242
Number villages that pay marshal only statutory fees.....	03

Total amount of salaries paid.....	\$35,817 00
Average salary paid each marshal.....	148 00
Number of villages that have other men besides marshal on the police force....	65
Number of villages not having other men on police force.....	240
Total number other men on police force.....	116
Average for each village.....	1.8
Number that pay wages besides fees.....	8
Number men paid wages besides fees.....	10
Total amount wages paid.....	\$5,040 00
Average for each man.....	\$504
Number villages having deputy sheriffs actively serving.....	233
Number of villages having no deputy sheriffs actively serving.....	72
Total number of deputy sheriffs actively serving.....	273
Average number deputy sheriffs for each village.....	1.2
Number villages having constables actively serving.....	253
Number villages having no constables actively serving.....	52
Number of constables actively serving.....	446
Average number constables for each village.....	1.8
Number villages having night-watches with police powers.....	69
Number villages having no night-watches.....	236
Total number night-watches.....	74
Average night-watches for each village.....	1.1
Number villages having village lockups (jails).....	237
Number villages having no lockups.....	68
Number lockups having prisoners confined May 1, 1900.....	17
Number having no prisoners on that day.....	220
Total number prisoners confined on that day.....	30
Average number prisoners for each lockup.....	1.8
Number prisoners that were males, 29; or 96 per cent.	
Number prisoners that were female, 1; or 4 per cent.	
Number that were native born, 23; or 76 per cent.	
Number that were foreign born, 7; or 24 per cent.	
Charged with being disorderly.....	16
Charged with being tramps.....	8
Charged with assault and battery, 1; larceny, 1; forgery, 1; embezzlement, 1; burglary, 1, and rape, 1; total.....	6
Whole number confined.....	30

MICHIGAN PRISON STATISTICS, 1900.

Table showing the number of inmates in the State penal and reformatory institutions, county jails, city prisons, and village lockups, on the first day of May, 1900, together with the crimes and offenses charged and the average age of inmates. Also the number of each sex, the number native and foreign born, and a classification as to what the crimes involved.

Crimes and offenses charged.	Michigan State Prison, Jackson.	State House of Correction and Reformatory, Ionia.	State House of Correction and Branch Prison, Marquette.	Detroit House of Correction, Detroit.	Industrial School for Boys, Lansing.	Industrial Home for Girls, Adrian.	County jails—(83 counties).	City prisons—(78 cities).	Village lockups—(305 villages).	Totals for each classification.
Murder and manslaughter.....	117	4	19	24			14			178
Assaults—all kinds.....	79	29	38	21			4			171
Burglary—all kinds.....	147	91	30	13	8		21	4	1	315
Robbery—all kinds.....	43	12	20	9			1			85
False pretense.....	2	7	1	1		1	4			22
Forgery.....	38	21	11	3		1	18		1	93
Larceny—all grades.....	142	145	35	146	220	53	93	3	1	838
Breaking and entering buildings.....	42	26	7	9						84
Resisting an officer, etc.....	2	6	1							9
Receiving stolen property.....	12	1		2						15
Perjury.....	10	2	1							15
Embezzlement.....	4	4		1						22
Arson.....	8	5	5	2		2	6		1	22
Incest.....	7			2						9
Adultery.....	1	3	1	4						9
Bigamy.....	8	3	1							12
Keeping house of ill-fame.....	4	2		5						11
Malicious destruction of property.....	1	1		4	10		8			24
Rape.....	68	17	19	2			18		1	125
Assaults on female children.....	21	12	3	2						38
Counterfeiting.....	1			23						24
Offenses against railroads.....	4	3		2	12					21
Habitual drunkards.....		6		4						10
Disorderly.....			6		30	152	191	12	16	407
Disturbing the peace.....				100						100
Prostitution.....				6		11				17
Offenses against U. S. laws.....				21						21
Trespass.....					10					10
Assault and battery.....					6	2	23	6	1	38
Vagrancy.....					14					14
Truancy.....					318	56				374
Ungovernable and incorrigible.....						18				18
Non-support.....							5			5
Drunkenness.....							22	15		37
Tramps.....							35	14	8	57
Insane persons confined.....							14	1		15
Other offenses (miscellaneous).....	5	8	5	3	2	9	75	14		121
Whole number.....	766	408	203	423	630	305	552	69	30	3,386
Number that were males.....	766	408	203	368	630		523	61	29	2,988
Number that were females.....				55		305	29	8	1	398
Number that were native born.....	596	341	126	347	470	209	387	40	23	2,539
Number that were foreign born.....	170	67	77	76	160	96	165	29	7	847
Average age of inmates, in years.....	35	29	34	31	14	16				
No. where crime involved life.....	192	11	44	24			14			285
No. where crime involved virtue.....	109	31	34	25		155	43	9	1	407
No. where crime involved property.....	432	307	109	217	248	57	165	8	4	1,547
No. where crime involved good gov't.....		35	11	89	332	75	272	36	25	875
No. where crime involved morality.....	33	24	5	68	50	18	44	15		357
No. insane in jails.....							14	1		15

DEDUCTIONS FROM FOREGOING TABLE.

It will be seen from the table that 22 per cent of the inmates of these institutions are confined at the Jackson prison, 12 per cent at Ionia, 6 per cent at Marquette, 13 per cent at the Detroit House of Correction, 19 per cent in the Industrial School for Boys at Lansing, 9 per cent in the Industrial Home for Girls at Adrian, 16 per cent in county jails, the other 3 per cent being in city prisons and village lockups.

Of these inmates 88 per cent were males and 12 per cent females. Their nationality shows 75 per cent to have been native born and 25 per cent foreign born. The average age of those confined in the four State prisons and reformatories (including the Detroit House of Correction), is 32 years. Those in the Industrial School for Boys average 14 years each, while the girls in the Industrial Home at Adrian average 16 years each.

The number where crime involved life was, 8 per cent; where it involved virtue, 12 per cent; involving property, 45 per cent; involving good government, 25 per cent; involving morality, 10 per cent. There were 15 insane persons confined in county jails and city prisons.

Regarding the crimes charged, 5 per cent were for murder and manslaughter, 5 per cent for assaults of all kinds, 9 per cent for burglary, nearly 3 per cent for robbery, the same for forgery, 25 per cent for larceny of all grades, 4 per cent for rape, 12 per cent for being disorderly, 3 per cent for disturbing the peace, 11 per cent as ungovernable and incorrigible, the other 26 per cent being various offenses. Those classified as disorderly, ungovernable and incorrigible were mostly from the industrial schools at Lansing and Adrian. Those charged with disturbing the peace were in the Detroit House of Correction.

About 35 per cent of the boys at the Industrial School were charged with petty larceny, and 50 per cent with truancy. A little over 50 per cent of the girls at the Industrial Home were charged with being disorderly, 18 per cent with truancy and 17 per cent with petty larceny. Of those confined in the county jails about 35 per cent were charged with being disorderly, and about 17 per cent with larceny.

In the Jackson prison over 15 per cent were convicted of murder or manslaughter, 19 per cent of burglary, and 18 per cent of larceny, showing a little over half the inmates of that institution convicted of these crimes. In the Ionia prison over 35 per cent were convicted of the crime of larceny. In the Detroit House of Correction over 33 per cent were convicted of larceny, and about 24 per cent with disturbing the peace.

The largest number of foreign born were in the city prisons, being about 42 per cent. The Jackson prison had 22 per cent of foreign born, the Ionia prison 16 per cent, the Marquette prison 38 per cent, the Detroit House of Correction 18 per cent, the Industrial School for Boys about 30 per cent, the Industrial Home for Girls 31 per cent, the county jails about 30 per cent and the village lockups 23 per cent.

REAL ESTATE

REPORTS FROM 110 AGENCIES

STATISTICS FROM REPORTS

REMARKS FROM AGENTS AS TO

BUSINESS AND OUTLOOK

CONDITION OF REAL ESTATE IN MICHIGAN.

In 1899 the Bureau made an extended inquiry into the condition of the real estate business in Michigan. The results justified the investigation. In all sections of the State the business was reviving and agencies were greatly encouraged in the outlook, a hopeful tone entering into their remarks.

It was deemed prudent to continue this inquiry for the current year and schedules were sent to 125 agencies to which 110 responded, over one-half supplementing their reports with remarks based on their personal observations. From these reports it is certain that this important business continues active and is constantly increasing. It is also noticeable that there is a much greater demand for city and village property than for agricultural lands, although this demand is less than in the few years preceding this report, and all conditions seem to point to a decided increase in the demand for farming land and a consequent rise in values. There is already a demand for small farms, especially in that part of the State where fruit growing is made successful, and prices for these small farms would have seemed exorbitant a few years ago. In sections of the State where there is yet timbered lands the demand and prices are constantly on the increase.

The real estate market depends on the general business of the country. When labor is employed a large per cent of the laboring men invest their surplus earnings in homes. A laboring man who has a home of his own has a feeling of independence far beyond his brother laborer who lives in a rented house. This one item is a large factor in the business of real estate. When business is brisk the man of moderate means indulges in real estate speculations and good profits often meet his investments. His action induces the man of capital to make heavy purchases which enhances the activity until all classes of real estate feel the stimulus, in turn affecting all other business. No business in the entire country is a surer index of general prosperity than the activity of the real estate market, touching as it does all classes of the people. It is gratifying to know the activity of real estate in connection with other business throughout the entire State.

About 62 per cent of the agencies reporting, supplemented their reports with remarks on the general condition of the business, more especially the local conditions affecting their immediate surroundings. The substance of these remarks are published and will be found interesting, not only for information regarding real estate, but for the general information concerning the local conditions in the several parts of the State.

STATISTICS FROM REAL ESTATE AGENCIES.

Number of cities and villages canvassed.....	91
Number of agencies canvassed.....	110

Number that report business as active as in 1899, 95; or 86 per cent.
 Number that report business not as active as in 1899, 15; or 14 per cent.

Number that report values higher than in 1899, 57; or 52 per cent.
 Number that report values the same as in 1899, 47; or 43 per cent.
 Number that report values lower than in 1899, 6; or 5 per cent.

Average increase in values is 13 per cent.
 Average decrease in values is 21 per cent.
 General average increase, 10 per cent.

Number that report an increase in sales over 1899, 62; or 57 per cent.
 Number that report a decrease in sales less 1899, 15; or 13 per cent.
 Number that report sales the same as in 1899, 33; or 30 per cent.

Average increase in sales is 27 per cent.
 Average decrease in sales is 25 per cent.
 General average of increase, 17 per cent.

Number that report most demand for city property, 69; or 63 per cent.
 Number that report most demand for agricultural lands, 41; or 37 per cent.

RECAPITULATION.

The 110 agencies canvassed were located in 91 cities and villages, representing all sections of the State. From their reports it will be seen that 86 per cent report real estate business as active as it was in 1899, which year was considered a prosperous one for this business. Only 14 per cent of those canvassed report business less active than last year.

Of these dealers, 57, or 52 per cent report an average of 13 per cent higher values than in 1899, while six report values 21 per cent lower, showing real estate values at least 10 per cent higher than last year at the same time, 47 or 43 per cent report values unchanged.

It is also evident that there has been a large increase in sales of real estate as compared with 1899, the reports showing that 62 agencies, or 57 per cent of those canvassed, have had an increase of 27 per cent, while only 15 report a decrease, said decrease averaging 25 per cent. The reports of 33, or 30 per cent show the sales of 1900 the same as in 1899. The reports show a general increase in sales, compared with 1899, of about 17 per cent, and that the demand for city and village property is much greater than for agricultural lands.

REMARKS FROM REAL ESTATE AGENCIES.

F. J. Hough & Son, Adrian—The tendency is toward buying small holdings and farms. Manufacturing conditions are not favorable in Adrian at present, and to that we lay the present inactivity in realty.

J. Q. A. Sessions' Agency, Ann Arbor—City has a healthy and continual growth. Putting money in new buildings considered a good investment.

G. M. Babcock, Atlanta—The people are more prosperous here than they have been in several years.

C. E. Thompson, Bad Axe—Sales and exchanges equal to last year, with no depreciation in values.

J. W. Brice, Battle Creek—A presidential year always disturbs real estate as money loaners want higher rate of interest. Speculation in other things that promise greater dividends a factor in stopping sales.

Garfield & Sampson, Battle Creek—All business increased.

M. H. Vernon, Battle Creek—Improvement in times largely due to better feeling between labor and capital, confidence in financial condition of the government and present administration.

Colt Land Co. (Ltd.), Bay City—Better demand among working men for purchasing homes this year.

Shearer Bros., Bay City—Better demand among working men for purchasing homes this year.

Belding Land & Improvement Co., Belding—No vacant houses or stores in city.

Leavitt & Guile, Bellaire—Timbered lands have decreased 20 per cent in value since one year ago, other real estate about the same.

A. G. Burman, Cadillac—It is something remarkable that rents are on the increase and every tenement occupied, while sales are almost nil.

R. L. Hubbard & Co., Caseville—There is scarcely any land for sale here at a reasonable price.

E. H. Green, Charlevoix—New resort locations are being sought after.

S. H. Taylor, Cheboygan—Improved lands and farms have raised in price and farmers in general are doing well.

J. B. Schuartz, Crystal Falls—High prices in lumber and labor makes city property slow, that with dwellings on selling best.

Clark-Farnsworth-Lucking Co., Detroit—Property sold at conservative prices, but more market than a year ago.

G. F. Hinchman, Detroit—Suburban plats selling to advantage of owners.

J. W. Legett, Detroit—Good improvement in realty looked for after fall election.

John J. Tuomey, Detroit—Good sales for manufacturing properties and good homes.

Homer Warren & Co., Detroit—Sale of workingmen's homes largely in excess of any year since 1892.

Merriam, Moore & Co., Escanaba—Timbered lands are in good demand.

Geo. E. Newall, Flint—People are investing money more than loaning it.

D. B. Butler, Frankfort—Very little difference between this year and last, both good years.

W. D. Leonardson, Fremont—Prices for agricultural lands are higher than last year for the reason we had poor crops here then, while prospects are good now for fruit and all crops except wheat.

Eugene Foster, Gladwin—There is an upward tendency in realty prices.

E. D. Blair, Grand Haven—Unimproved lands have to compete with State tax lands; buyers from large cities of improved farms expect to buy for less than cost of improvement and do so on low grade soils; taxes cut a figure; improved farms stand as a year ago, more active.

A. D. Wood, Grand Marais—The paid up contracts on all real estate is nearly 100 per cent over last year.

G. L. Alexander, Grayling—Think values show a tendency to decline.

Eugene Rutan, Greenville—Increased factory interests is adding to growth of city.

J. H. McKee & Sons, Grand Rapids—Better employed labor but not much better paid.

Chas. Conklin, Harrisville—Lumbering on large scale about given up and people are engaging in farming.

Stevens & Sackrider, Hart—Real estate business not active for several years.

A. D. Cadwallader, Hastings—Agricultural land would be in greater demand if labor were better paid.

Isaac Marsilge, Holland—Prices on property slightly in advance of one year ago.

C. H. Baird, Holly—Laboring men are buying homes, and a better demand for farms.

Dube & Bandin, Houghton—Many have their money invested in copper stocks so have no cash to invest in real estate.

Thos. Gordon, Jr., Howell—Poor crops have caused a depression in real estate values.

Armstrong & Kingsford, Iron Mountain—Timbered lands commenced to be active about last November; no demand for farming land, while that from which timber has been removed and is adapted for agriculture is being offered at less and less price every year; do not expect as great a demand this fall for timbered lands as the price of saw logs, mining timber, spruce pulp wood, railroad ties, posts and poles are high while labor and supplies are not; when labor is as high and scarce as last winter it takes one-half to one-third more men to do same work; prices for labor were higher last winter than since 1881.

D. M. Nolan Real Estate Agency, Ironwood—Wages 10 per cent higher and mines working full capacity, which encourages laborers to buy homes.

J. L. Potts, Ithaca—Prices and demand for lands upward.

L. C. Townsend, Jackson—Taxing of mortgages a detriment as capitalists seek loans outside the State to avoid taxation.

B. F. Parker, Kalamazoo—Sold more city property, but good call for farms, not as much sale on account of higher prices.

H. C. Murphy, Kalkaska—Agricultural lands are brisk, village property fair, and no timbered lands offered.

J. E. Wright, Lake City—County experiencing a boom in farm lands.

Carson Warren, Leland—Timber lands sold well last fall but on account of lower prices in lumber, farm lands have lowered.

William A. McKinney, Manistique—Furnace and chemical works employ more men than ever before; more money invested in building during last year than during any one previous year.

Thompson & Sibbens, Manistee—Increased price of building materials have raised price of improved property.

Geo. Wagner, Marquette—Unsettled condition of prices in produce and manufactured articles have caused a dullness in real estate; since drop in iron and steel, demand for those lands have ceased; also for like reason the demand for timbered lands is dull.

M. Anderson & Co., Midland—With us \$600,000 is being expended in the manufacturing industries of bromides and chemicals, in which timber cuts no figure.

Chas. L. Chamberlain, Muskegon—No demand for agricultural lands here.

Martin Crocker, Mt. Clemens—No better sale for farm property than one year ago.

L. H. Beeson, Niles—Several dams are to be built on St. Joseph river to use in creating power to be transmitted for traction, and local uses, at long distances.

Hamblin & Crawford, Owosso—No call for money on mortgage investments.

Schoolcraft & Co., Port Huron—But few calls for high priced homes, most sales being to laboring men on homes ranging in price from \$600 to \$1,500.

William Schmidt, Rogers—Most village property sold last year by owners themselves.

T. P. Zander, St. Charles—Prices on real estate largely dependent on coal output; increase of shafts makes greater demand for business places and dwellings.

A. J. Gennell, St. Ignace—People are moving here and buying homes, which can be had very cheap.

Perrins & Baldwin, St. Johns—Country is on a wave of prosperity; and we never knew a presidential year when every department of business seemed so prosperous.

Schultz & Pixley, St. Joseph—During the year ending March 1, 1900, there were built in this city 63 new houses, three factories, and a \$15,000 school house; we have not an empty house or room in our city and our factories are working overtime.

William M. Snell, Sault Ste. Marie—I attribute the growing disinclination of capital to invest in Michigan urban property to the excessive valuations placed, in many instances, by the assessors on the same. This results not in "equal" taxation, but injustice of the rankest sort; also to the mortgage tax law, which drives out capital and discourages the improvement of property by labor. The lender will not loan it unless the borrower will pay the additional burden of 2 and 3 per cent, consequently he hesitates at the payment of excessive rates, and the capital seeks other investments. Should the borrower pay it, it is a double tax on the property. Hope our new tax commission can rectify it; think the correction should come from legislative, rather than executive functions.

J. E. Whalen, Sault Ste. Marie—There exists an encouraging degree of prosperity in this city; at least \$1,500,000 was expended during the past year, and a larger sum will be expended in the near future.

H. W. Wisner, Stanton—People from other parts of the State and country coming here and buying land.

W. K. Sawyer, Three Oaks—There appear to be more sales of small fruit farms near the lake than of grain lands. The cities appear to be gaining in population and wealth faster than the farming sections. I note that from 1880 to 1890, the harbor counties with cities gained in population and wealth while the agricultural sections fell off, at least

in population. Counties like Berrien, wholly devoted to agriculture, and especially the township of Bertrand, which was the banner township for the largest yield of wheat sometime in the 80's fell off 100 inhabitants. I think there are three reasons—first, agricultural implements taking the place of manual labor; second, many young men, especially those properly schooled, leave the farm for the city; third, the more wealthy farmers buy out the smaller farmers.

F. A. Allen, Union City—City is having a healthy growth; more real estate changed hands the past year than the year previous.

R. M. Pierce, West Bay City—In comparing, I find, in 1897, sales 520 acres, \$2,400; 1898, 1,000 acres, were \$6,500; 1899, 950 acres, were \$4,140; and 1900 (half year only), 160 acres, \$510.

South Detroit Improvement Co., Wyandotte—High price of building material checked the increase in land values this year, but for this the demand would have increased 100 per cent.

D. C. Griffin, Ypsilanti—Failure of wheat crop hurt sale of farm lands.

COMMERCIAL STATISTICS

REPORTS FROM 525 RETAIL DEALERS

DRY GOODS, CLOTHING, BOOTS AND SHOES
GROCERIES AND HARDWARE

INDIVIDUAL VIEWS OF DEALERS

COMMERCIAL STATISTICS.

During the month of August the Commissioner of Labor directed an inquiry in five leading lines of trade, dealers in staples entering into the consumption of every family. Blank schedules were sent to 125 of each of the following trades: Dry goods, clothing, boots and shoes, groceries and hardware. Reports were received from 105 each, a total of 525. These were located in 182 different cities and villages in all parts of the State, and their reports must be a fair index of the condition of the retail trade in the State at that time.

The city and country merchant is in closer touch with the great body of the people than any other class of citizens. On the prosperity of the people depends the prosperity of the merchant. His goods and wares are the necessities of every household. When money is distributed to the great body public, it is used in the purchase of every class of merchandise, and every merchant feels the throb and beat of active business industry. When labor is unemployed money cannot circulate among the masses, and only the bare necessities of life are purchased, and too, with a grudging hand.

Local causes often enter into the condition of trade and merchants in one locality may report active business, while in another section of the country some local cause, like the loss of a special crop, or the removal of some industry, may for the time being curtail trade for that special locality.

The canvass made indicates a general activity in trade in all sections of the State. In strictly agricultural districts the loss of the wheat crop was most severely felt, the merchant as well as the farmer being sufferers. To offset this, in the section known as the fruit region there has been a prolific yield of first-class fruit, which found a ready sale at remunerative prices.

Less than 11 per cent of those reporting regard the future outlook for trade as poor, which fact is most encouraging, as these dealers are close observers, not only of local conditions, but of the general business of the country. In connection with this the remarks made by those interviewed will be found both interesting and instructive. The final recapitulation gives in brief the results of this canvass.

STATISTICS OF THE DRY GOODS TRADE.

Number of cities and villages canvassed.....	96
Number of dealers canvassed.....	105
Number where sales were larger than in 1899.....	67
Number where sales were not larger than in 1899.....	38
Average per cent larger than in 1899, 16½.	

Number that say outlook for trade is good.....	40
Number that say outlook for trade is fair.....	47
Number that say outlook for trade is poor.....	18

This shows that of those canvassed, 64 per cent were having 16 $\frac{1}{2}$ per cent larger trade than in 1899, while but three reported trade as less than the previous year, the average per cent of increase being 16 $\frac{1}{2}$.

The reports also show that 38 per cent regard the outlook for trade as good; 45 per cent as fair; while only 17 per cent report a poor outlook; this latter being generally attributed to local causes.

REMARKS BY DEALERS.

Adrian—Trade depends on crops—outlook poor.

Albion—Manufacturing closed—no wheat crop—outlook poor.

Alma—Perhaps fall trade will improve business.

Alpena—Lack of rain in spring hung up logs, so hurt fall trade.

Ann Arbor—Collections slow.

AuSable—Trade increasing each year.

Bangor—Business good. The past four years has witnessed great changes for the better.

Battle Creek—Season not as good as last—outlook good for political year.

Belding—Factories running very light.

Benton Harbor—First of 1900 poor, but very good now.

Big Rapids—The number of factories lost during year by fire causes a depression.

Cadillac—Crops good—mills running full time.

Calumet—Everybody employed—immigrants arriving each day and finding employment.

Carson City—Outlook prosperous.

Manistee—As many dry goods sold but more competition divides the results.

Marquette—Business better but more competition.

Marshall—Wheat a failure and fall crops uncertain.

Mayville—Good crops—fair prices—labor all employed.

Monroe—Outlook no better for the coming season.

Mt. Pleasant—Outlook for all crops except wheat very good.

Muskegon—Iron quiet, all other factories running full.

Niles—Outlook poor on account of wheat failure.

Norway—Outlook depends on results of election.

Otsego—Wheat crop a failure—paper mills closed for repairs, etc.

Owosso—More competition has increased our business.

Paw Paw—Fruit crop very good.

Reed City—Outlook depends largely on fall crops.

Saginaw—While sales show an increase, the quantity of goods handled (as far as yardage is concerned) remains about the same.

St. Ignace—Tourists made our summer trade good.

St. Johns—Dealers overestimated last season's trade and bought heavily; this will make wholesale trade light for some time.

St. Louis—Outlook not as good as for 1899.

South Haven—Much depends on fruit crop, which is very good.

- Three Rivers—Think sales will increase this fall.
- Union City—Short wheat crop and presidential election this fall bad for business.
- Vicksburg—Mostly farmers' trade here and, as wheat failed, this makes trade dull.
- Williamston—Trade equal to last year.
- Ypsilanti—Failure of wheat crop makes farm trade slow.
- Charlevoix—Increasing stock and treating customers well makes better trade.
- Charlotte—Outlook not as good as for last year.
- Coldwater—Wheat crop a failure.
- Decatur—Wheat crop poor—peppermint half crop—corn, potatoes and fruit good.
- Detroit—People employed—outlook good—dry goods dropping in prices—election will interfere more or less with business.
- Dexter—Failure of wheat crop makes poor trade.
- Dowagiac—Farm trade poor—city trade good.
- Dundee—Increase looked for.
- Edmore—Failure of wheat crop for three year's.
- Elk Rapids—Trade depends on crops.
- Gaylord—Much depends on potato crop.
- Gladstone—On account of poor crops railroad business has dropped off.
- Gladwin—Fair crops—labor employed—county being settled fast.
- Grand Rapids—Shrinkage looked for on account of presidential election.
- Greenville—Backward season.
- Hart—Outlook for trade good because of the good outlook for fruit.
- Hartford—Outlook for fruit good—wheat a failure.
- Holland—Outlook fair considering election year.
- Hudson—Spring weather against trade—wheat failure will have bad effect.
- Ionia—Present year most prosperous in our history.
- Ironwood—Republican success will insure good business.
- Ishpeming—Increase not looked for.
- Ithaca—Outlook favorable.
- Jackson—Failure of crops.
- Kalamazoo—Campaign year bad for business.
- Lansing—Trade hurt by advance of prices—indications of a slump in prices.
- Lawton—Fruit outlook good—all crops good except wheat.
- Mancelona—Good wages—people employed—good crops—plenty of work.

STATISTICS OF THE CLOTHING TRADE.

Number of cities and villages canvassed.....	102
Number of dealers canvassed.....	105
Number where sales were larger than in 1899.....	57
Number where sales were not larger than in 1899.....	48
Average per cent larger than in 1899, 14.	

Number that say outlook for trade is good.....	39
Number that say outlook for trade is fair.....	57
Number that say outlook for trade is poor.....	9

This shows that of those canvassed, 54 per cent were having an average of 14 per cent larger trade than in 1899, the other 46 per cent while not reporting an increase, reported no decrease.

The reports also show that 37 per cent regard the outlook for trade as good; 54 per cent as fair, while only 9 per cent regard the outlook as poor.

REMARKS BY DEALERS.

Adrian—More competition than last year.

Alma—Sugar beets and beans good—wheat poor, but not a leading crop here.

Ann Arbor—This year equal to last.

Athens—Wheat poor, makes trade slow—other crops good.

Battle Creek—Wheat failure and slow starting of shops makes trade poor.

Belding—Prices of goods high—farm products poor—labor poorly paid.

Big Rapids—A trifle more sales this year than last.

Boyer—Fruit crop a failure.

Bronson—Outlook equal to 1899.

Buchanan—Failure of wheat crop only prevents big business here.

Cassopolis—Loss of wheat crop will affect fall trade.

Centerville—Wheat crop poor.

Cheboygan—Business good this year.

Chesaning—Farmers buying a better grade of goods than formerly.

Crystal Falls—People earning money but afraid to spend it—uncertainty of iron market has a demoralizing effect on trade.

Detroit—More goods sold this year than last because of competition—collections poor—demand for credit increased.

Dowagiac—Farm trade poor—factory good.

Escanaba—Labor occupied and well paid—trade good.

Flint—Wheat crop a failure, all others good—factories running full time—good pay—no idle men—last year Flint factories turned out and sold 90,000 light jobs, saying nothing about lumber, wagons, sleighs and cutters; this is one for every two minutes for three hundred days at ten hours per day.

Frankfort—Competition strong, have held our own but no increase.

Gaylord—Election year bad for trade—crops poor.

Grand Haven—On account of failure of two manufacturing plants many people have left town, but we are holding our own.

Grand Ledge—The advance in woollens and cottons have hurt trade.

Hancock—Outlook not as good as in January.

Hart—Our products, fruit and potatoes good, outlook excellent.

Holland—Trusts have fluctuated the price of woollens too much for good trade.

Houghton—Selling more fine goods.

Iron Mountain—Outlook depends on election.

Jackson—Election hurts trade.

Kalamazoo—Retailers having foreseen the advance in the price of woolens bought and have on hand good sized stocks; uncertainty regarding future values hurts trade—presidential election always tends to disturb trade.

Kalkaska—As much clothing sold this year, but book business has hurt retail trade.

Ludington—Trade fair—no celebration so people went elsewhere to trade.

Manchester—Agricultural district here—crops poor—farm trade slow.

Marcellus—The shortage in crops makes the outlook poor.

Marine City—Farm crops and beets good—trade good.

Marquette—Much depends on election.

Menominee—Much depends on election.

Monroe—City trade good—wheat failure makes farm trade slow.

Montague—Good fruit crop—farmers confident—lumber business light.

Mt. Clemens—Outlook poor on account of failure of wheat crop.

Mt. Pleasant—Shortage on wheat crop here.

Norway—Think the outlook better for the coming season.

Otsego—Late season a drawback.

Pontiac—Presidential year always uncertain.

Quincy—Cement factory here employs many and helps all classes of trade.

Reading—Failure of crops hurt trade.

St. Louis—People buying a better grade of goods—money and work plenty.

Saranac—Outlook good for fall trade.

Sturgis—Wheat and hay a failure—corn good.

Tecumseh—Wheat an entire failure, one bushel where it should be 100.

Union City—Wheat crop a failure—people bought heavily last fall owing to advance in prices, outlook for fall quiet—election year bad for trade.

Vicksburg—Failure of wheat makes small sales.

West Bay City—No ship building in steel yards, election year bad for trade.

White Cloud—Changing from lumbering interests to farming.

STATISTICS OF THE BOOT AND SHOE TRADE.

Number of cities and villages canvassed.....	99
Number of dealers canvassed.....	105
Number where sales were larger than in 1899.....	62
Number where sales were not larger than in 1899.....	43
Average per cent larger than in 1899, 14.	
Number that say outlook for trade is good.....	54
Number that say outlook for trade is fair.....	41
Number that say outlook for trade is poor.....	10

This shows that of those canvassed 54 per cent were having an average of 14 per cent larger trade than in 1899, the other 46 per cent re-

porting neither a larger nor smaller trade. It is also shown that 51 per cent regard the outlook for trade as good; 40 per cent as fair, and only 9 per cent regard it as poor.

REMARKS BY DEALERS.

Adrian—Shortage in wheat and hay will affect trade.

Albion—Manufacturing running light—farm crops light—trade for 1900 slow.

Alma—Times close for next six months—people demanding better goods.

Bad Axe—Hail storms destroyed many crops last season—outlook very good.

Battle Creek—Department stores hurt trade in general.

Big Rapids—Crops never better excepting wheat.

Burr Oak—Expect large trade this fall.

Caro—Poor crop in sugar beets last year affected trade.

Cassopolis—Wheat poor—other crops good.

Centerville—Wheat poor makes dull trade.

Clayton—People complain of hard times—want cheap goods—hard to maintain prices.

Detroit—Backward season hurt trade—working people pay bills more promptly with less complaining.

Dundee—Have increased sales, except June, each month over 1899.

Eaton Rapids—Poor wheat will make collections hard for the year.

Edwardsburg—Unloading stocks crippled trade this season.

Flint—Increase larger but for backward spring.

Grand Rapids—Factories running part time—have increased sales owing to larger stock.

Harbor Springs—Farmers, to the amount of 65 per cent, are in debt, trying to work out.

Hersey—Trade mostly local.

Hillsdale—Trade dull—wheat failure makes farmers hard up.

Houghton—Selling finer grade of goods this year than last.

Hubbardston—Prospects never more flattering.

Imlay City—Look for a large trade this fall.

Ionia—Election hurts trade.

Ironwood—Advertising houses and general stores have hurt our trade.

Ithaca—Think will sell more heavy goods this fall—rubbers poor and high.

Kalamazoo—Prospects locally the poorest in several seasons.

Leslie—Chattel mortgage sale here has affected our trade.

Litchfield—Failure of wheat hurt trade.

Ludington—Fruit good makes farm trade good.

Mason—More competition has divided trade—we lack a good grain market.

Mayville—Farmers buying well, no idle men.

Monroe—Late season affected trade.

Mt. Pleasant—Wheat poor, may hurt trade.

New Haven—Agricultural district here and wheat a failure.

Ontonagon—Population increasing—new mines opening—lumbering good—business in general good.

Paw Paw—Demand for better goods.
 Petoskey—Prices unfavorable, owing to advance in manufacturers' prices.
 Plainwell—Would have an increased trade but for wheat failure.
 Pontiac—April, May and June sales were very large.
 Reed City—People buying a better grade of goods.
 Rockford—Crops good.
 Romeo—Wheat one-half a crop, all other crops good.
 Saginaw—Better class of goods sold.
 Schoolcraft—Not a manufacturing center.
 South Haven—Collections 25 per cent better than in 1899.
 Sturgis—Failure in wheat, other crops good.
 Vicksburg—Better goods bought.
 Ypsilanti—Selling better grade of goods.

STATISTICS OF THE GROCERY TRADE.

Number of cities and villages canvassed.....	100
Number of dealers canvassed.....	105
Number where sales were larger than in 1899.....	63
Number where sales were not larger than in 1899.....	42
Average per cent larger than in 1899, 16.	
Number that say outlook for trade is good.....	61
Number that say outlook for trade is fair.....	37
Number that say outlook for trade is poor.....	7

This shows that of those canvassed, 60 per cent were having 16 per cent larger trade than in 1899, the other 40 per cent, reporting neither a larger nor smaller per cent of trade.

It will also be seen that 60 per cent regard the outlook for trade as good; 35 per cent as fair while 5 per cent think it is poor.

REMARKS BY DEALERS.

Athens—No wheat crop in this locality.
 Bay City—Too much competition for the size of the place.
 Belding—Competition has divided the trade, not lessened it.
 Cadillac—Trade never better in our line than at present.
 Caro—Trade here on the gain, much of it caused from the sugar factories.
 Carson City—Too many wagons on the road.
 Cassopolis—Largely farm trade here—failure of wheat here for two years.
 Cedar Springs—Peddlers without license traveling through the country the only drawback.
 Centerville—Failure in wheat and hay hurts our trade.
 Central Lake—See no reason why trade should not increase the rest of the year.
 Cheboygan—Trade will increase in all lines as farm products are higher.
 Coldwater—Outlook encouraging for the coming year.
 Detroit—Goods have advanced in price, but not labor—laborers our principal trade—peddling and department stores hurt trade—collections poor.

Dexter—Wheat crop a failure, hurts trade.

Eaton Rapids—Failure of wheat crop will hurt trade.

Edmore—General prospects better than for many years—collections good.

Flushing—No price cutting—collections better than for years.

Frankfort—Labor in good demand—depend largely on resort trade.

Gladstone—Business in good condition here.

Grand Haven—Outlook for trade good.

Grand Ledge—This year an improvement over last and last year better than preceding one.

Grand Rapids—Trade quiet—department stores make hard competition.

Hillsdale—Trade better this year than for the last five.

Ishpeming—Trade depends largely on the iron market.

Lansing—Bad place for cut prices.

Lowell—Trade better for the past six months—berries selling better.

Manistee—Need a better garnishee law.

Marshall—Trade light on account of wheat failure.

Monroe—Wheat crop a failure.

Pontiac—Margins on goods poor in this vicinity.

Tecumseh—Peddlers, grange purchasing agents and Chicago catalogue stores cut off much trade that we formerly had.

Union City—Spring crops good—fair prospects for fall trade.

West Bay City—Business steadily increased under present administration.

White Cloud—Large harvest and fruit crop—good prospects for fall trade.

Williamston—Sales 30 per cent smaller—causes unknown.

St. Clair—Money plenty, also work—few calls for new credit.

STATISTICS OF THE HARDWARE TRADE.

Number of cities and villages canvassed.....	100
Number of dealers canvassed.....	105
Number where sales were larger than in 1899.....	48
Number where sales were not larger than in 1899.....	57
Average per cent larger than in 1899, 17.	
Number that say outlook for trade was good.....	45
Number that say outlook for trade was fair.....	40
Number that say outlook for trade was poor.....	14

This shows that of those canvassed 46 per cent were having 17 per cent larger trade than in 1899, the other 54 per cent reporting neither a larger nor a smaller trade.

It will also be seen that 43 per cent regard the outlook for trade as good; 44 per cent as fair, while 13 per cent regard it as poor.

REMARKS BY DEALERS.

Allegan—Outlook not up to the average—anticipate a dull year.

Alma—Unsettled condition in prices responsible for the dropping off.

Alpena—General hardware trade better this year than last.

Ann Arbor—Falling off in trade on fence wire and building material—general trade better.

Athens—High price of iron and low crop of wheat makes sales slow.

AuTrain—Still greater increase in agricultural implements.

Bad Axe—Poor crop of wheat for two years.

Battle Creek—Great building boom here.

Bay City—Very little building here.

Belding—Much depends on election.

Bellaire—Outlook good—great development of farming land here.

Big Rapids—Poor wheat crop and potatoes high.

Blissfield—Crops good except wheat—building material high, so less building.

Brooklyn—Trade improved since reduction in prices.

Buchanan—Crops light and trade values too high.

Calumet—Think trade will be light next year—output of iron uncertain.

Capac—Bicycle trade better than ever before—outlook very good.

Caro—General business good—sugar industry makes us trade.

Cassopolis—Poor wheat crop for two years.

Cedar Springs—Poor wheat and fruit crops.

Charlevoix—More competition has lessened our trade.

Cheboygan—Catalogue jobbing houses taking much trade from us.

Clare—Chicago department stores taking much trade from us.

Coldwater—The sales of 1899 were 15 per cent in advance of 1898.

Coloma—Fruit good—building material high—lessens building.

Constantine—Failure of wheat lessens country trade.

Detroit—Trade quiet—little building—high building material lessens that work.

Dowagiac—Failure of wheat crop for two years.

East Jordan—Dull lumber trade has affected business.

Eaton Rapids—Outlook not equal to 1899.

Gladstone—Last year large building contracts made extra trade—this year regular sales.

Grand Ledge—Money plenty and excellent trade in spite of high prices.

Grand Haven—Building slight—farm trade good.

Grand Rapids—More building because of cheap hardware and lumber—crops and fruit good—cash trade also wholesale equal to last year—falling off in furniture sales.

Greenville—Failure of wheat crop for two years and high prices make sales slow.

Hart—Spring trade shortened by the advance in the iron market.

Hillsdale—Light wheat crop may lessen trade.

Homer—High prices will decrease trade.

Howell—High price of building material and the drought last year have decreased trade.

Hudson—Failure of wheat and high price of material lessen building and trade.

Ionia—Failure of wheat and high price of material lessen trade.

Iron Mountain—Outlook good unless iron slumps.

Ithaca—Building about one-third what it was last year.

Jackson—High prices deter customers; prices on trust goods very high

Lansing—Trade quiet at present.

Lawrence—Trade unusually good in this section for this time of the year.

Lawton—Lumber and hardware being high not much building.

Lowell—First half of 1900 better than last half.

Ludington—No building, other lines good.

Marquette—Look for good business when prices become fixed.

Marshall—Outlook poor; crops, etc., poor; desire for credit much greater.

Menominee—Sales larger but profits less owing to declining market.

Monroe—Poor wheat crop and high prices makes farm trade dull.

Otsego—Lumber high and building light.

Ovid—Not as good as in 1899 owing to advance in heavy hardware.

Paw Paw—Much building; outlook for fruit excellent.

Port Huron—Building poor.

St. Clair—City trade good, farm trade poor.

St. Joseph—Advance in materials have deferred building.

South Haven—Decline in wire and nails makes dealers careful in buying, mostly month to month purchases.

Three Oaks—Catalogue houses interfere largely in this section.

West Branch—Wheat failure; hay one-half crop; other crops good.

RECAPITULATION.

Whole number cities and villages canvassed.....	182
Whole number of dealers canvassed.....	525
Whole number where sales were larger than in 1899.....	297
Whole number where sales were not larger than in 1899.....	228
Total average per cent larger than in 1899, 15.4.	
Whole number where outlook for trade was good.....	239
Total number where outlook for trade was fair.....	228
Total number where outlook for trade was poor.....	58

This recapitulation shows that of the 525 dealers canvassed, 56 per cent were having an average of 15.4 per cent larger trade than in 1899, while with 44 per cent the trade remained the same as the previous year. Of the entire canvass but three reported a smaller trade than in 1899.

As regards the outlook for the future, 46 per cent of the entire canvass reported it as good, 43 per cent as fair and 11 per cent as poor. As a rule, where a poor outlook was reported the condition was attributed to local causes. In making the canvass no pains were spared to obtain the true condition of the retail trade. The information obtained is certainly very gratifying.

HOTEL KEEPERS INTERVIEWED

**Canvass Covers 100 Michigan Towns and Em-
braces 105 Good Hotels**

REMARKS OF PROPRIETORS

MICHIGAN HOTEL KEEPERS.

Michigan is noted for her well regulated and well kept hotels. The metropolitan hotels of the larger cities, the substantial, but more moderate ones of the prosperous villages, and the less extensive ones of the little towns, have a world-wide reputation. There are but few places in Michigan where the traveler does not find a cheerful, commodious and tidy hostelry—a “home,” as it were, where rest and comfort awaits him.

The business of the hotels is a sure index of the general business of the country. The duties of a commercial salesman take him to any part of the country where trade can be found. The hotels cater to this class of custom. It not only advertises their own business, but it warrants customers, the best that can be found. The demand for goods in any locality will bring the “traveling men,” who are generally active, sharp business men, with keen foresight, whose good opinions of a town and its hotels are well worth retaining.

In making this canvass 105 good hotels, located in all parts of the State were interviewed. Those known as summer resorts, where only a few months’ business is done each year, would make a chapter by themselves, but these were avoided, as not tending to give a fair data of the hotel business in the State.

Many of the hotel keepers interviewed supplemented their reports with remarks or personal observations on the general situation. We publish some of these as interesting.

STATISTICS AS GIVEN.

Number cities and villages canvassed.....	100
Number hotels canvassed	105
Number that say business is as prosperous as in 1899.....	73
Number that say business is not as prosperous as in 1899.....	32
Number where traveling salesmen have increased since 1899.....	37
Number where traveling salesmen are the same as in 1899.....	31
Number where traveling salesmen have decreased since 1899.....	37
Average rate of increase reported, 27 per cent.	
Average rate of decrease reported, 26 per cent.	

The causes given for the increase are: General prosperity, 20; local causes, 17.
The causes given for the decrease are: Trusts, 30; politics, 6; rural mail, 1.

RECAPITULATION.

It will be seen that 70 per cent of the hotel keepers interviewed report

that business is as prosperous as it was one year before, many of them reporting it more so, while 30 per cent report their business as less prosperous.

Regarding traveling salesmen, who are generally considered among the best class of customers with Michigan hotels, 37, or 35 per cent of those canvassed, report that this class of custom has increased 27 per cent in the past year, while a like number (37) report that the custom of traveling salesmen has decreased with them 26 per cent in the same period. But at the same time 31, or 30 per cent of the whole, report that they see no perceptible change in the number of traveling men on the road.

The causes given by the 37 for the increase in traveling men are principally "general prosperity," although nearly 40 per cent say that local causes affect this trade. The improved conditions, assigned to local causes, can also be attributed to the general prosperity of the country.

The 37 who say that there is a decrease in the number of traveling salesmen on the road generally attribute the cause to "trusts and combinations." It is noticeable that a few think that politics (in a presidential year), affects trade, and one hotel keeper says that the establishment of rural mail delivery hurts his business. On the whole the reports from the hotel keepers of Michigan would indicate a prosperous business.

REMARKS BY HOTEL KEEPERS.

Allegan—Men are taken off the road on account of the trusts.

Alma—There is general prosperity in the country.

Bangor—Think trusts have decreased traveling men about 10 per cent.

Bay City—Local causes have affected us slightly.

Belding—Local causes and general prosperity have increased our business.

Bellaire—Less job men on the road, but more men out with new lines.

Berrien Springs—Not a resort town, but the resort trade helps us.

Cadillac—Has seen a most prosperous spring and summer.

Charlevoix—There are more people on the road. Did over \$500 more business in June than in June, 1899.

Charlotte—Trusts and combinations have taken men off the road. Hotels in small towns will have to curtail expenses. Many will keep boarders.

Coldwater—Our business has been first-class for the past two years and runs very even.

Copemish—Business increased by local causes and general prosperity.

Constantine—Business so far this year has been better than for years; perhaps you can attribute it to our new paper mill just established.

Crystal Falls—This city is dependent wholly on the iron market. The slump in July made a slight slack in business.

Detroit—Our trade has been kept up by the increased trade through the State and adjoining states. Traveling salesmen are only a small part of our trade. Business better than last year, made up mostly of professional men. Better hotel facilities in Detroit bring custom.

Dowagiac—Traveling men think that combines are hurting them.

Durand—General prosperity has kept my business good, but combines have taken off many traveling men.

Eaton Rapids—Too many lines of business consolidated; fewer men to sell.

Elk Rapids—Business better. Have several new manufactories started.

Escanaba—General prosperity in the country, especially in the iron and copper districts. Cannot see that trusts have hurt our business.

Fenton—Cannot see any difference in trade in this small town.

Frankfort—Prosperity and increase of business makes trade good.

Grand Haven—A sound money basis has brought prosperity and confidence. This condition will always bring satisfactory results.

Grand Rapids—We do not notice any increase or decrease in the number of traveling salesmen on the road. Our business remains the same.

Greenville—Local causes have increased my business.

Hart—Traveling men are my authority that monopolies are hurting business.

Howell—The trusts have taken the men off the road.

Iron Mountain—Business has increased fully 25 per cent and will be still better in the fall. Iron is firm.

Ithaca—Traveling men seem discouraged. An over production makes sales very light.

Jackson—Last year was an exceptionally prosperous one, from which there has been a slight decrease. Presidential election hurts business some, as also do the trusts.

Kalamazoo—The building of the telephone companies here have helped our business perceptibly.

Lansing—I do not see as many traveling men as in 1895-6, but my business has increased greatly.

Lapeer—Altogether, business is better than it was. More competition, and more hustle brings good results.

Mancelona—Business is one-third better than it was one year ago. I attribute it to the general increase all over the country and to local causes, such as lumber, etc.

Marshall—Generally have poor business in a campaign year.

Midland—Traveling men are covering the same territory quicker than formerly, and not so many men.

Monroe—A general improvement in the condition of all business.

Negaunee—Good sales of iron has increased business 25 per cent. This is an iron district. We depend wholly on getting out iron.

Newberry—The wholesale houses are employing young, cheap help, which is hurting hotel business, as they claim the houses will not allow a rate of \$2.00 per day for board.

Norway—My business has more than doubled in two years. Better times; better wages, and all laboring men at work.

Otsego—Business increased 50 per cent. Prospects good for more business.

Paw Paw—Less men on the road has decreased my business one-half.

Petoskey—Business has increased. Am enlarging my house and accommodations.

Pontiac—If the trusts keep forming the hotel business will go to the

wall within 18 months. Our business has fallen off one-half through the loss of traveling men thrown out by the trusts.

Port Huron—Think the trusts affect the transient trade.

Portland—We hear plenty of complaints from traveling salesmen and the impression seems to prevail that the trusts are lessening the number of salesmen, which we think is true.

Reed City—Trusts, combines and the centralization of manufactures cause a decrease in the hotel business.

Romeo—Opening the electric road brings us more people.

St. Clair—The summer trade is very light with all hotels in this locality.

St. Ignace—Cold weather and the exposition at Paris have hurt business.

St. Joseph—We always have a big summer trade, better than ever this year, and our regular business is also better. Traveling men about the same.

Sault Ste. Marie—Our new water power and our lumber industry have increased business one-third.

St. Louis—I think local causes have increased my business.

Sherman—Labor is paid better wages, hence live higher. Everybody has money and more goods sold. Almost everything is saleable. Insurance men are doing a good business. Outlook splendid.

Spring Arbor—I always notice that there are less salesmen on the road just before election every four years.

South Haven—The growth of the place has increased business 25 per cent. The fruit industry is great, and it is fast becoming a resort town.

Stockbridge—I attribute our increase in business to manufacture and employed labor. According to statistics we are manufacturing and exporting more goods than ever before in our history.

Sturgis—Trusts have decreased business 25 per cent.

Tawas City—Less business. Combines put less men on the road.

Three Oaks—A more systematic working of the small towns has increased business. We see its effects.

Three Rivers—This town is prosperous in all lines and that increases the hotel business. It is 10 per cent better.

Vassar—Rural mail delivery keeps farmers from coming to town.

Vermontville—More enterprise in telephone building helps us.

West Branch—More money, more business and better times.

White Cloud—Business increasing all the time. Railroad business also.

Whitehall—The tobacco trust has taken seven men off this route.

Ypsilanti—In my opinion trusts have caused a decrease of 25 per cent.

AGRICULTURAL IMPLEMENTS

A GREAT AND GROWING INDUSTRY

An Interesting Chapter Full of Statistical Detail

THE MANUFACTURE OF AGRICULTURAL IMPLEMENTS.

Extent of the Industry in Michigan—Number of Firms Canvassed—Where Located—How and When Organized—Capital Invested—Products Manufactured—Value of Output in 1899—Outlook for the Current Year—Employes and Their Wages—Office Help and Their Pay—How Often Wages Are Paid—Traveling Salesmen and How Paid.

THE INDUSTRY IN MICHIGAN.

Among the industries canvassed by the Michigan Labor Bureau during the year, that of the manufacture of agricultural implements occupied considerable attention. Few realize the importance of this growing industry, which has immense capital invested and employs thousands of workmen.

FIRMS CANVASSED AND WHERE LOCATED.

Special agents of the Bureau visited 41 firms that were turning out agricultural implements. They were located in 33 cities and villages, viz.: Adrian, Battle Creek, Bay City, Greenville, Kalamazoo, Lansing, Pontiac and Saginaw, two each; Albion, Alma, Ann Arbor, Clare, Detroit, Dowagiac, Eaton Rapids, Grand Haven, Hudson, Imlay City, Ionia, Jackson, Lapeer, Lyons, Milford, Monroe, Mt. Clemens, Mt. Pleasant, Pine Grove, Port Huron, Richmond, St. Johns, Stanton, Traverse City and Vassar one each. There are probably a few other small firms in the State, but their entire output is small as compared with those canvassed, and would not affect the general result.

HOW AND WHEN ORGANIZED.

These 41 firms are organized as follows: Twenty-one are incorporated, eleven are individual concerns, and nine do business as co-partnerships. They have averaged over 16 years each in business. One commenced business 48 years ago, one 47 years, one 41, one 37, one 34, one 33, one 31, one 29, one 27, one 25, one 24, one 21, two 20, two 19, one 18, two 16, one 13, one 11, one 10, three 9, three 8, three 7, three 6, two 5, two 4, one 2, one 1 year, and one commenced operation this season.

CAPITAL INVESTED.

The capital invested by these 41 firms ranges from \$1,000 to \$1,250,000 and aggregates \$4,438,626, an average for each of \$108,259. The reports show that one firm has a capital of \$1,250,000; one \$550,000; one \$500,000; one \$482,000; one \$320,000; one \$300,000; one \$200,000; one \$150,000; one

\$100,000; one \$75,000; one \$70,000; one \$42,000; one \$40,000; one \$30,000; one \$28,626; three \$25,000; six \$20,000; two \$15,000; two \$10,000; one \$7,500; one \$7,000; one \$6,500; three \$6,000; two \$4,000; two \$3,000, and three \$1,000.

PRODUCTS MANUFACTURED.

These firms manufactured threshing machines, with all their attachments complete; plows, land rollers, cultivators, harrows, potato planters, corn planters, horse rakes, hay tedders, hay presses, feed cutters, root cutters, feed cookers, bean seeders and harvesters, bean sorters, manure spreaders, grain drills, post hole diggers, fruit tree sprayers, and corn shellers. In addition to the above, 14 of these firms manufacture products other than agricultural implements, the value of which reaches thousands of dollars.

VALUE OF OUTPUT.

One of these factories was not in business in 1899, and one other did not manufacture agricultural implements that year. The other 39 had an output valued at \$7,138,340, an average for each of \$183,034. Of this output \$5,532,440 came from ten firms, none of them turning out less than \$100,000 worth of products.

THE OUTLOOK FOR THE CURRENT YEAR.

When the canvass was made questions were asked the managers of each factory as to the business of the current year as compared with that of 1899, and also as to the future outlook. Of these, 27 said their product of 1900 would equal that of 1899, while 14 said it would not be as much. At the same time 22 said their business would exceed that of last year, the other 19 saying it would be about the same. As to the future outlook, four said it was excellent, 21 said it was good, 14 said it was fair, one said it was bad and one did not answer. It will be seen that, taken in comparison with the prosperous business of the manufacturers in 1899, the year 1900 will be equally as good, while the prospects for the future in this line of manufactures is considered bright.

EMPLOYES AND WAGES.

The aggregate number of workmen, exclusive of office help, employed by these firms was 3,217, an average of 78 for each factory. The aggregate number of employes of eight of the largest firms was 2,536, none of these having less than 125 persons on their pay rolls. The other 33 firms ranged from two to 100 each. The daily pay rolls of these 3,217 employes aggregated \$4,987.34, an average daily wage for each employe of \$1.55. This was for all labor, both skilled and common. The pay rolls of the eight largest firms aggregated \$3,985.20 daily, the average wage for all kinds of labor being \$1.57 per diem. Common labor was never below \$1.00, while some of the skilled labor commanded \$3.00 to \$4.00 per day.

OFFICE HELP AND WAGES.

As a rule office work commanded good wages, but in many of the offices the clerical work was done by members of the firm, there being

16 factories that employed no office clerks. The 25 firms employing office help report an aggregate of 185 clerks, an average of over seven each. Many of the smaller concerns have only one clerk each. The office help in the eight large firms before mentioned aggregates 157 clerks, or about 85 per cent of the whole. The aggregate daily wages of the 185 clerks is \$452.27, or about \$2.45 each.

HOW OFTEN WAGES ARE PAID.

One of these firms (the employes of which represent only 5 per cent of the whole) has a monthly pay day; seven, representing 25 per cent of all employes, pay once in two weeks, while 33, which represent 70 per cent of all the employes, pay every week. With only two exceptions the large firms pay each week, one of these pays once in two weeks, the other pays only once in each month.

TRAVELING SALESMEN AND HOW PAID.

Nineteen of these firms employ no traveling salesmen, although in some instances members of the firm act in that capacity. These latter are not enumerated among those employed. The other 22 firms employ 337 traveling salesmen, an average of 15 each, although 287 of them are employed by five firms. Of the 337 traveling salesmen employed, 313 work on a stated salary, which averages \$1,030 per year each. The lowest salaries is \$600 per year, paid by two firms. The other 24 salesmen work on commission, averaging \$1,028 per year. As before stated 14 of these factories manufacture other products besides agricultural implements, their salesmen selling these other goods while on the road. Agricultural implements manufactured in Michigan are now sold in all parts of the world where crops are raised.

CANVASS OF THE EMPLOYES.

The Bureau also made a personal canvass of the employes of these manufacturers, interviewing 1,760 persons. They were located in 30 towns and were employed by 41 different firms.

The inquiries covered their ages, nativity, social condition, at what part of the work employed, length of time employed, number of children, number to support, hours worked per day, months worked per year, average daily wages, as to savings, whether owning homes, renting or boarding, cost of rental and board, and whether employed steadily. The result of the canvass is shown in the following:

WHAT THE CANVASS SHOWS.

Number of towns canvassed.....	30
Number of firms canvassed.....	41
Number of employes canvassed.....	1,760
Average number canvassed for each factory.....	42.9
Average number canvassed for each town	58.6
Average age of entire canvass.....	34.4 years.
Number that were native born.....	1,376
Number that were foreign born.....	384
Average time residing in United States.....	19.3 years.

Number that were married.....	1,223
Number that were single.....	502
Number that were widowed.....	35
Number children in families of married and widowed.....	2,600
Average number for each.....	2
Number entire canvass has to support.....	5,367
Average number for each.....	3
Number who work by the day.....	1,597
Number who work by the piece.....	163
Average number years worked at their trade.....	8.6
Average number hours worked per day.....	9.9
Average number months worked per year.....	10.8
Aggregate amount of daily pay roll.....	\$2,984 78
Average for each factory canvassed.....	72 80
Average daily wage for each employe canvassed.....	1 69
Number who have steady employment.....	1,752
Number who do not have steady employment.....	8
Number who can save from their earnings.....	852
Number who cannot save from their earnings.....	908
Number who own a home.....	611
Number who rent a home.....	627
Number who board.....	522
Number of homes free from encumbrance.....	383
Number of homes not free from encumbrance.....	228
Average monthly rental for those who rent.....	\$6 65
Average weekly board for those who board.....	3 10

CLASSIFICATION OF WORK.

The employes canvassed were divided into 24 different classes, the number canvassed of each class and their wages are given below:

Superintendents, 6; average daily wages.....	\$5 64
Foreman, 63; average daily wages.....	2 71
Draughtsman, 5; average daily wages.....	2 35
Bookkeepers and office clerks, 41; average daily wages.....	2 22
Shipping room, 66; average daily wages.....	1 38
Engineers, 20; average daily wages.....	1 86
Moulders, 172; average daily wages.....	2 28
Cupola tenders, 17; average daily wages.....	1 50
Machinists, 269; average daily wages.....	1 88
Boiler makers, 32; average daily wages.....	2 00
Finishers, 11; average daily wages.....	1 28
Tinsmiths, 17; average daily wages.....	1 77
Filers, 12; average daily wages.....	1 48
Core makers, 17; average daily wages.....	1 57
Polishers, platers, etc., 33; average daily wages.....	1 70
Pattern makers, 15; average daily wages.....	2 27
Painters, 126; average daily wages.....	1 64
Iron workers, 134; average daily wages.....	1 70
Wood workers, 236; average daily wages.....	1 65
Buffers and grinders, 52; average daily wages.....	1 41
Laborers, 162; average daily wages.....	1 27

Helpers, 74; average daily wages.....	\$1 37
Apprentices, 157; average daily wages.....	82
Miscellaneous, 23; average daily wages.....	1 51
Average daily wages of entire canvass.....	1 69

DEDUCTIONS.

It will be seen that the majority of these employes show over three-fourths to have been American born, there being 78 per cent native born and 22 per cent of foreign birth. Those of foreign birth have resided in the United States an average period of 19.3 years each. Their social condition shows that nearly 70 per cent of those canvassed are married, a little over 28 per cent single and 2 per cent widowed.

Those married and widowed have an average of 2 children each. The entire canvass has an average of 3 persons each to support including the person canvassed.

A little over 90 per cent work by the day, the other 10 per cent being employed by the piece. Their day's work average 9.9 hours each, and they average a little over 10.3 months work each year. The report shows that daily wages average \$1.69 each. Practically, the entire canvass have steady employment, only eight of the entire number reporting otherwise.

Regarding saving something, over and above the cost of living, from their earnings, 48 per cent say they can save, while 52 per cent say they cannot. On the questions of homes 34 per cent own their homes, 63 per cent of which are free from encumbrance. About 35 per cent rent their homes and 31 per cent hire their board. The average monthly rental for those who rent is \$6.65 each, and the average price paid for board for those who board is \$3.10 per week.

MICHIGAN'S GREAT INDUSTRY
LEADS IN THE
MANUFACTURE OF STOVES AND FURNACES

Millions of Capital Invested and Thousands of Men Employed

STATISTICS OF THE MANUFACTURE OF STOVES AND FURNACES.

The manufacture of stoves and furnaces in Michigan has assumed great proportions and the industry is a leading one. The city of Detroit is the greatest stove manufacturing center in the world, the product of three factories in that city being over 215,000 stoves annually, the employes of these three firms aggregating over 2,500 persons.

ESTABLISHMENTS CANVASSED.

A special canvasser from the Bureau visited 21 establishments in the State, canvassing a large proportion of the employes, and receiving a statistical report from each firm. Undoubtedly there are a few places in the State where stoves and furnaces are manufactured on a small scale that were not visited by the canvasser, but they aggregate a small per cent of business as compared with the whole. Those canvassed are located in eleven different cities, viz.: Adrian, Alma, Chelsea, Coldwater, Detroit, Dowagiac, Grand Rapids, Lansing, Marshall, Millington and South Haven. Detroit has eight stove factories, which includes the three large ones before noted—The Detroit Stove Works, The Michigan Stove Company and The Peninsular Stove Company. One of the largest establishments in the State is that of E. Bement's Sons, at Lansing, who are also extensively engaged in the manufacture of agricultural implements. Another extensive plant is the estate of P. D. Beckwith, at Dowagiac, which, under the management of the managing executor, Mr. F. E. Lee, is ranked among the largest and best institutions in the State. The Glazier Stove Company, at Chelsea, is also assuming large proportions.

HOW AND WHEN ORGANIZED.

Of these 21 factories eleven are incorporated, six are partnerships, and four are individual concerns. They have been in operation an average period of 15 years each. One commenced business in 1864, two in 1869, two in 1871, one in 1872, one in 1875, one in 1878, two in 1881, one in 1884, one in 1888, one in 1890, two in 1893, two in 1894, one in 1895, one in 1898, and two in 1899. Five of these firms manufacture furnaces exclusively, and two of them manufacture furnaces in addition to stoves.

CAPITAL INVESTED.

These 21 establishments have an aggregate capital of \$3,378,632, or an average of \$160,887 each. Seven of the largest ones have a combined capital of \$3,077,000, an average of \$439,551 each.

STOVES AND FURNACES MANUFACTURED.

In the year 1899 these factories manufactured 368,521 stoves and 3,542 furnaces. In six factories alone 317,572 stoves were manufactured, an average for each of nearly 53,000, two of the same firms also making 2,783 furnaces, and in addition to the stoves manufactured one of these firms turned out over \$400,000 worth of agricultural implements and "bob" sleighs. Also, in addition to the stoves and furnaces manufactured, eight of these firms are engaged in the manufacture of other products, such as agricultural implements, refrigerators, castings, sheet metal, hot air registers, etc., some of them having as much capital invested in the manufacture of agricultural implements as in the stove and furnace business. Arrangements are being made by some of these institutions to enter more extensively into the manufacture of furnaces, and it is probable that the coming year will see this part of the business largely augmented.

VALUE OF OUTPUT.

The value of the output of these 21 institutions for the year of 1899 was \$6,308,917. This would be an average for each of \$300,425, but the value of the product of the six large firms above noted was \$5,621,844 or an average for each of \$936,974. The product of seven other firms ranges from \$50,000 to \$150,000 each.

THE PROSPECTS FOR 1900.

Of the 21 factories canvassed 20 report that their output for the current year will equal that of 1899, only one firm reporting a smaller output. Fifteen firms report that their output will exceed that of last year. This, with the increased cost of iron and the higher wages paid labor will bring the value of the product for the current year to nearly or quite \$8,000,000.

LABOR'S PAY DAYS.

In eleven of these institutions the employees are paid once in two weeks, the other 10 having a regular weekly pay day. The "two weeks" system seems to be the most popular with the larger institutions.

EMPLOYEES AND WAGES.

The aggregate number of the employees of the entire 21 factories outside of the office forces, was 4,224 persons, showing an average of 201 employees for each factory. Of these 3,500 are employed in five of the largest institutions, an average of 700 employees for each, one of them employing over 1,000 persons. The amount of wages paid daily to these employees is \$8,214, or an average per diem for each employee of \$1.94. This includes all grades of work, from the skilled workmen to common labor. Many of the employees, especially among the moulders and polishers, average from \$3.00 to \$4.00 per day.

OFFICE CLERKS AND THEIR PAY.

Six of these factories report no office help outside of the members of the firm; five report one clerk each; two have two clerks each; one has

four; two have five each; one has eleven; one has twenty-two; one twenty-five; one thirty, and one has thirty-one—a total of 142 office clerks. Their pay ranges from \$1.75 to \$3.75 per day, the average being \$2.48 each.

TRAVELING SALESMEN.

Traveling salesmen are employed by 17 of these firms, only four having no men on the road. The whole number of traveling salesmen employed by 17 firms is 146, five factories having only one each, while three factories have, respectively, 25, 30 and 34 each. The other factories range from two to eleven each. Six of these salesmen work only on commission, their income averaging \$1,050 each annually. The other 140 work on stated salaries, ranging from \$600 to \$1,800, the average being \$1,278 each. The aggregate of the salaries paid these salesmen annually approximates \$180,000. The manufactured products are sold in all the civilized parts of the earth.

THE FUTURE OUTLOOK.

Regarding the future outlook for business, two firms report it "bright," sixteen say it is "good," and three say it is "fair." This shows a hopeful view taken by these manufacturers, but many of the answers are based on the continued general prosperous condition of the country.

CANVASS OF EMPLOYEES.

A personal canvass was made of the employes of these manufacturers, the canvasser interviewing 1,663 persons. They were located in 11 towns, and were employed by 20 different firms.

The inquiries covered a large scope, embracing age, nativity, social conditions, number of children, whole number to support, whether working by day or piece, years worked at their employment, hours worked per day, months worked per year, daily wages, whether employment is steady, as to savings, whether owning home, renting or boarding, monthly rental, and price per week for board. The result of the canvass follows, together with the classifications of work and the average daily wages for each class.

WHAT THE CANVASS SHOWS.

Number of factories canvassed.....	20
Number towns where located.....	11
Number of employes canvassed.....	1,663
Average number canvassed in each factory.....	83
Average number canvassed in each town.....	151
Average age of those canvassed, 31.8 years.	
Number that were native born.....	873
Number that were foreign born.....	790
Average time residing in the United States, 18.4 years.	
Number that were married.....	1,076
Number that were single.....	559
Number that were widowed.....	28
Number of children in families of married and widowed.....	2,784
Average number for each.....	2.5

Number entire canvass has to support.....	5,550
Average number for each.....	3.3
Number who work by the day.....	749
Number who work by the piece.....	914
Average number of years worked at their employment.....	9.5
Average number of hours worked per day.....	9.9
Average number of months worked per year.....	10.1
Aggregate amount of daily pay roll.....	\$3,718 77
Average for each factory canvassed.....	185 94
Average daily wages for each employe canvassed.....	2 24
Number who have steady employment.....	1,659
Number who do not have steady employment.....	4
Number who can save from their earnings.....	677
Number who cannot save from their earnings.....	986
Number who own their home.....	505
Number who rent their home.....	582
Number who board.....	576
Number of homes free from encumbrance.....	260
Number of homes not free from encumbrance.....	245
Average monthly rental for those who rent.....	\$7 25
Average weekly board for those who board.....	3 60

CLASSIFICATION OF WORK.

The employes canvassed were divided into 15 different classes, the number canvassed of each class, and their wages, are given below and will be found interesting to those who have given the wage question a study:

Superintendents, 2; average daily wages.....	\$3 72
Foremen, 53; average daily wages.....	3 05
Office clerks, 3; average daily wages.....	1 83
Shipping room, 23; average daily wages.....	1 40
Moulders, 590; average daily wages.....	2 55
Polishers, platers, etc., 224; average daily wages.....	2 96
Mounters, 200; average daily wages.....	2 55
Cupola tenders, 10; average daily wages.....	1 66
Pattern makers, 82; average daily wages.....	2 25
Buffers and grinders, 47; average daily wages.....	1 53
Machinists, 44; average daily wages.....	2 00
Helpers, 28; average daily wages.....	1 48
Laborers, 137; average daily wages.....	1 34
Apprentices, 153; average daily wages.....	94
Miscellaneous, 67; average daily wages.....	1 49
Average daily wages of entire canvass.....	2 24

DEDUCTIONS.

It will be seen that the majority of these employes show a little over one-half to have been American born, there being 52 per cent native born and 48 per cent of foreign birth. Those of foreign birth have resided in the United States an average period of 18.4 years each.

Their social condition shows that nearly 65 per cent of those canvassed were married, a little over 33 per cent single and 2 per cent

widowed. Those married and widowed have an average of 2.5 children each. The entire canvass has an average of 3.3 persons each to support including the persons canvassed.

A little over 45 per cent work by the day, the other 55 per cent being employed by the piece. Their day's work averages 9.9 hours each, and they average a little over ten months' work each year. The reports show that their daily wages average \$2.24 each. Practically, the entire canvass have steady employment, only four of the number reporting otherwise.

Regarding saving something over and above the cost of living from their earnings, 41 per cent say they can save, while 59 per cent say they cannot. When it is remembered that these employes embrace all classes of labor, and that many of them receive only common wages, and at the same time have large families to support, the percentage of those who can save something from their earnings is larger than might be expected.

On the question of homes, 30 per cent own their homes, 51 per cent of which are free from encumbrance. About 35 per cent rent their homes and 35 per cent hire their board. The average monthly rental for those who rent is \$7.25 each, and the average price paid for board, for those who board, is \$3.60 per week.

BITUMINOUS COAL

A Constantly Increasing Industry

REPORT OF INSPECTOR ATWOOD

CANVASS OF EMPLOYEES

Mine Operators' Monthly Reports, Deductions, Etc.

INSPECTOR ATWOOD'S REPORT.

OFFICE OF COAL MINE INSPECTOR,
St. Charles, Mich., Dec. 1, 1900.

Hon. Joseph L. Cox,
Commissioner of Labor, Lansing, Mich.:

Dear Sir—I have the honor to submit my second annual report, as Coal Mine Inspector of Michigan, for your consideration. The report covers a period of 12 months, ending November 30, 1900.

MINES IN OPERATION.

The year past has been a prosperous one for the coal mining industry in the State. Only two mines have been abandoned while eight new ones have been opened and are now in operation. There are now 31 mines large and small, taking out coal in Michigan. Of these, five are located near Grand Ledge, in Eaton county, all but one being known as "drift" mines, operated on a small scale, their combined monthly output averaging about 500 tons of very fair bituminous coal. At present the "New Hope" mine and the "Jackson" mine are the only ones in operation in Jackson county, the "Trumbull" having closed down early in the season. Those interested are prospecting with the hope that a new mine will be opened in that section of the State in the near future. The other mines in operation are located in the Counties of Bay, Saginaw, Shiawassee and Huron, the most extensive ones being in Saginaw county.

CONDITION OF THE MINES.

In my inspection of the mines I have generally found them in good working condition, there being occasionally one where the requirements of the law are not complied with. My experience with the operators during the year, regarding escapement shafts, has been very trying and often annoying. Out of the 31 mines in operation, 19 have escape shafts, six have just commenced operation, the five at Grand Ledge do not need them, and one, the Michigan Standard Coal Company, at Sebawaing, Huron county, has been ordered to construct one. See notice to employes below:

To the Employes of the Michigan Standard Coal Company:

"Inasmuch as the Michigan Standard Coal Company has failed to comply with the mining laws of the State, in the matter of sinking an escapement shaft as required by said laws, I hereby condemn said mine of the above named company, known as the Sebawaing Mine, as operating in violation of the laws of the State, and I take this method of warn-

ing all men working in said mine that if they so continue to work they must do so at their own risk."

(Signed,)

WILLIAM ATWOOD,
Mine Inspector.

IMPROVEMENTS.

During the year 14 escapement shafts have been sunk, three have been repaired, safety catches have been put on at eight of the old mines and at all of the new ones. Gates to enclose the top of the shaft have been constructed in eight places, and six traveling or "manways" have been made to avoid crossing the shafts. Thirteen sets of scales have been tested and found correct. Many other improvements of a minor nature have been made, all tending to the comfort and safety of the employees.

ACCIDENTS.

I am sorry to report 10 fatal accidents in and around the mines during the year. Six of these were killed by falling roof; two by premature discharge of shots; one man was caught by a descending cage as he was crossing the shaft—although there was a separate roadway for passing from one side of the mine to the other. The other fell from the trestle that leads from the tippie to the dirt dump. Although there was an investigation made at the time of each accident the responsibility of six of them rested on the unfortunate victims, the other four being accidents which seemed almost unavoidable.

IMPURE OIL.

The use of highly adulterated oil which gives off an excessive quantity of smoke, and is very injurious to health, demands an increased volume of air, and may demand further legislation. Along this line I have used my best endeavors to induce operators to use a better grade of illuminating oil, and in some instances have succeeded. Agents and compounders of oils often deserve the censure they receive in furnishing impure oils. It may be necessary for the department to secure the passage of an act to prevent the continuance of this practice. There are people engaged in this industry who will assist these agents in disposing of their impure oils, notwithstanding its deleterious effects on their employes and the increased expense to themselves.

MINING MACHINERY, ETC.

During the year eight new mining machines have been installed, making 34 now in operation. Of these 27 are of the projectile type and seven of the rotary make. Six of the latter are operated by electricity; all others by compressed air.

The J. H. Somers' Coal Company has installed complete electric plants at both their mines, by which they operate their mining machinery, and their pumps. At their No. 1 mine this company have three Morgan-Gardner electric chain machines, and at their No. 2 mine they are using three Jeffrey's electric chain machines.

The Michigan Mine, in Bay county, have one Jeffrey's and one Ingersoll-Sargeant projectile machines, operated by compressed air.

The Bay Coal Company have eight Sullivan machines in operation, and mine all their coal by machinery.

The Pittsburg Coal Company have two Sullivan machines in use and will operate more as their mine develops.

The Wenona Coal Company and the Central Coal Company each have eight Harrison machines, all doing good work.

The Northern Coal and Transportation Company is also installing a compressed air plant and will operate the Harrison machines.

METHOD OF OPERATING.

The method of mining coal in this State is known as the "Square" or "Room and Pillar" system. This system consists of driving narrow entries or roadways from the bottom of the shaft in opposite directions into the coal and then cross-entries are driven from the main entries, leaving square blocks of coal. Rooms are then opened only in the cross-entries, where a large number of miners find employment. A pillar of coal is left standing between the rooms. There can be no fixed rule followed for a proper thickness of these pillars, nor for the width of the rooms, as the conditions existing in the several mines are widely different. The thickness of the pillars and the width of the rooms must be determined by the nature of the roof and the thickness of the coal. These conditions often vary greatly in the same veins of coal.

GASES IN COAL MINES.

There are no mines in existence free from gases. These gases are evolved from the coal itself and from the surrounding strata; also from the decomposition of organic matter. Carbureted hydrogen gas, commonly called "fire-damp," has been found in only two mines in this State, and only in very small quantities. It has, however, proved to be one of the greatest dangers encountered in mining. This gas issues from the pores of the coal, sometimes bursting forth under great pressure, in blowers. These outbursts are most dangerous and men are liable to be suffocated before they are aware of danger. In a pure state this gas will not explode, but as it spreads with a certain amount of air it becomes explosive, and when brought in contact with light an explosion is the result; hence the necessity of good ventilation in all mines.

Carbonic acid gas is known as "black damp." It is produced in mines by the burning of lamps, the breathing of men and animals and the decaying of organic matter, such as timber, food, animal offal, etc. This gas is really more dangerous to miners than fire damp, as it ultimately kills them through a slow process. Where black damp exists in a mine a large current of air is necessary to dilute and render it harmless. Black damp is the heaviest of all mine gases. No light will burn in it, so that its effects upon lamps is a warning to miners, all of whom are familiar with it. It is a positive poison and dangerous to breathe.

Sulphurated hydrogen is known as "white damp." It is produced from powders and other explosives. Much of it is discharged when spontaneous combustion takes place or when coal is ignited in the mine. It is the most dangerous of all mine gases, especially to those who have had no experience with it. When an experienced miner detects its odor he immediately retreats to fresh air. It is an inflammable gas and in mines where powder and other explosives are used in loosening coal or rock miners suffer from its effects. This gas is more dangerous to

miners than the black damp, but unlike the latter their lamps will burn in it with great clearness, even while the atmosphere is made most deadly by its presence.

VENTILATION OF MINES.

The proper ventilation of the mines yet remains the most important problem for the attention of operators and managers. Every mine has this subject under consideration. Not only the health and lives of the miners depend on a supply of pure air, but when the supply is insufficient there is a scarcity of employes and a consequent reduced output of coal, which, of course, is followed by a loss to the owner.

I am pained to admit that the ventilation of some of the mines in Michigan is not as good as it should be. Defects in the proper distribution of fresh air in some of the mines may be traced direct to leakage through doors and stoppings, in "break-throughs" and in small and contracted airways.

LAW NEEDS AMENDING.

Section 8 of the present law should be amended to read: "Throughout every coal mine there shall be maintained currents of fresh air sufficient for the health and safety of all men and animals employed therein, and such ventilation shall be produced by fans or other artificial means. The quantity of air required to be kept in circulation shall not be less than 100 cubic feet per minute for each person and not less than 300 feet for each animal at work therein. Said currents shall be forced into every working place throughout the mine, so that all parts of the same shall be reasonably free from standing powder, smoke and deleterious air of every kind."

DOORS AND STOPPINGS.

Much can be said concerning the importance of having well constructed doors and stoppings placed in all mines, for though the mine may be equipped with the most modern devices for supplying air, they are useless unless the air is conducted through the mine by well-constructed doors and stoppings so that the circulation may be correctly controlled. All doors should be so constructed so that they will close by their own weight, and at all the important doors a trapper should be stationed to open and close them when required, and all employes should be instructed to close all doors immediately on passing through. During the past year I have found that employes are often careless in this regard, thus allowing great quantities of air to pass to parts of the mine where it was not intended or needed, the result being that this great loss of air robbed the employes of the supply intended for them.

SUGGESTIONS FOR RULES GOVERNING COAL MINE OPERATIONS.

First, That the mine inspector be furnished with an anemometer to register the quantity of air passing in a given time, and that the quantity be not less than 100 feet per minute per man and boy, and not less than 300 feet per minute for each mule, and that the inspector be asked to make a weekly report to the department stating the condition of each

mine generally, and also stating the quantity of air passing per minute in the entire mine, and the number of men, boys and mules employed in the mine.

Second, That no operator, or official, shall be notified of the inspector's coming visit to the mine, but take them by surprise as much as possible.

Third, That at a new mine where only a limited number of men are working, the company shall be allowed to use a steam jet as an artificial means of ventilation, but when an air shaft has been sunk, the company shall be notified to put a furnace or fan, as they may elect, for ventilation, to insure sufficient air under any circumstances.

Fourth, That the mine inspector not only be asked to see that a sufficient quantity of air passes in a given time, but see that sufficient quantity goes round the working places, that is to say, that all the break-throughs in the entry, except the last one at the face of the entry, shall have permanent stoppings and when another be made, the entry man shall notify the mine boss or superintendent, and the other break-through shall be stopped within twenty-four hours from the time of the notice.

Fifth, That when four rooms have been turned in an entry and break-throughs made in said rooms, a door shall be placed in the entry between first and second rooms, and when eight rooms have been turned and break-throughs made in said rooms there shall be a check door put in the entry between seventh and eighth room, and the check door moved every four rooms thereafter, to insure the air to pass through the working places, instead of passing in the entry, which shall apply to all the entries in the mine. There shall also be permanent stoppings in all the break-throughs in the first room in the entry except the last one nearest to the face of the room, and not more than six rooms in operation on one entry without the first door.

Sixth, That no oil be used in a mine by the miners below a standard test, and that the mine inspector be instructed to examine the oil, and notify the company that he will hold them responsible for such violation.

CANVASS OF EMPLOYEES.

In the month of September I made a personal canvass of employes of mines on schedules furnished by the Bureau. The inquiries were numerous and vital, covering the questions of age, nationality, social condition, number dependent for support, at what part of the work engaged, whether employed by the day or by the ton, wages received and whether saving or not. The result of the canvass follows, and will be found interesting. The number canvassed embraces about 80 per cent of the whole number of employes of the mines then in operation:

WHAT THE CANVASS SHOWS.

Whole number of mines canvassed.....	25
Number of employes canvassed.....	1,311
Average age of those canvassed, 31.6 years.	
Number that were native born.....	693
Number that were foreign born.....	618
Average number of years the foreign born have been in U. S.....	16

Number who were married.....	692
Number who were single.....	575
Number who were widowed.....	44
Number of children reported by the 619 married and widowed.....	1,970
Average for each	2.7
Whole number to support by the 1,311 canvassed (including person canvassed) ..	3,868
Average number to support for each person canvassed.....	3
Average number of years these employees have worked at coal mining.	12.6
Number who work by the day.....	322
Number who are paid by the ton.....	989
Average number hours worked per day.....	8.1
Average number of days worked per month.....	20.2
Average number of months worked per year.....	9
Average daily wages for entire canvass.....	\$1 91
Number who can save from their earnings.....	444
Number who cannot save from their earnings.....	867

CLASSIFICATION OF WORK.

The 1,311 employees canvassed were classified into 18 different employments, the following showing the number canvassed in each employment, together with the average wages received by each class:

Superintendents, 3; average daily wages	\$2 72
Mine bosses, 13; average daily wages.....	2 07
Machine runners, 26; average daily wages.....	2 66
Blacksmiths, 10; average daily wages.....	2 40
Carpenters, 3; average daily wages.....	2 25
Timbermen, 27; average daily wages.....	2 24
Tracklayers, 26; average daily wages.....	2 21
Pumpmen, 2; average daily wages.....	2 10
Cagers, 20; average daily wages.....	2 10
Drivers, 102; average daily wages.....	2 10
Engineers, 10; average daily wages.....	2 09
Trimmers, 15; average daily wages.....	2 05
Dumpers, 3; average daily wages.....	2 00
Weighmen, 5; average daily wages.....	1 94
Helpers, 18; average daily wages.....	1 88
Mining, 990; average daily wages.....	1 84
Firemen, 9; average daily wages.....	1 71
Laborers, 29; average daily wages.....	1 55
Average daily wages of entire canvass.....	1 91
Increase per day over canvass of 1899.....	21

DEDUCTIONS FROM THE ABOVE.

An analysis of the condition of those canvassed show that the average age of those employed in Michigan coal mines is a little over 31 $\frac{1}{2}$ years; that 53 per cent are native born and 47 per cent are of foreign birth; that those of foreign birth had lived in the United States an average of 16 years each.

Regarding their social relations, 52 per cent are married, 44 per cent are single and about 4 per cent are widowed. Those who are married and widowed have an average of 2.7 children each. The 1,311 canvassed have an average of three persons each to support, including the person canvassed. This number to support will probably hold good with the en-

tire employes of coal mines. This, taken in connection with the average daily wages received by these employes, should show more savings than is reported, but it must be remembered that there are only 20 days worked each month and only nine months each year.

The classification of work shows 18 different grades of employments, and while all are employes of coal mines, the term "mining" is applied to only about 75 per cent of them, the work of the others being classed under other headings. Those classified as "mining" are invariably paid by the ton for their work, leaving less than 25 per cent who are employed by the day.

The day's work of the coal mine employes average 8.1 hours. They average 20.2 days' work per month and work nine months per year. This, at \$1.91 per day, shows about 24 cents per hour, \$39.00 per month, and \$350.00 per year. The inference must be that only those having no families are able to save from their earnings over and above the cost of living. It is no wonder that 66 per cent report that they can save nothing.

It will be noticed that these employes have worked at their several employments an average of about 12 1/2 years each, showing that they had followed the vocation of coal mining in other than Michigan mines, as the Michigan coal industry dates back but a few years.

COURTESIES EXTENDED.

It is a source of pleasure for me to report that courtesy has been extended me in all my relations with the operators and employes. I have been careful and watchful of the rights of all. I have visited the mines as often as time and my other duties would permit, carefully looking to all the details of the work and striving to enforce all provisions of the law.

I am very grateful for the personal aid given me by yourself and the uniform courtesy and kindness extended me by the deputy commissioner and the other assistants in the office. I shall endeavor to merit these courtesies by a prompt charge of my duties, being guided in the future by the experience of the past.

Very respectfully yours,

WILLIAM ATWOOD.

Coal Mine Inspector.

THE MICHIGAN COAL INDUSTRY.

Michigan coal mines in operation December 1, 1900.

Line number.	Names of the mines.	County where located.	Names of the managers.	Postoffice address.
1	Monitor Coal Co.....	Bay ..	J. H. Gimelin....	West Bay City.
2	The Bay Coal Mining Co.....	"	J. E. Hawkins....	Bay City.
3	Michigan Coal Mining Co.....	"	J. S. Etsold....	"
4	Central Coal Mining Co.....	"	W. A. Knapp....	West Bay City.
5	Valley Coal Mining Co.....	"	W. H. Sweeny....	"
6	Handy Bros.' Mining Co.....	"	C. W. Handy....	" " "
7	Wenona Coal Mining Co.....	"	E. B. Foss....	Bay City.
8	Wolverine Coal Co.....	"	John St. Wuepper	Colfax.
9	Saginaw Coal Co.....	Saginaw	Robt. M. Randall	Saginaw.
10	Pere Marquette Coal Co., shaft No. 1.....	"	Robt. M. Randall	"
11	Pere Marquette Coal Co., shaft No. 2.....	"	Robt. M. Randall	"
12	Standard Mining Co.....	"	T. B. Jones....	"
13	Northern Coal & Transportation Co.....	"	F. R. Judd....	"
14	J. H. Somers' Coal Co., shaft No. 1.....	"	F. G. Benham....	St. Charles.
15	J. H. Somers' Coal Co., shaft No. 2.....	"	F. G. Benham....	"
16	Michigan Coal Co.....	"	C. R. Campbell....	Saginaw.
17	Stephenson Coal Mine.....	"	Geo. Stephenson.	Carbon.
18	St. Charles Coal Co.....	"	J. F. Winkler....	Saginaw.
19	Robert Gage Coal Co.....	"	Chas. Coryell....	Bay City.
20	Barnard Coal Co.....	"	Arthur Barnard..	Saginaw.
21	Riverside Coal Co.....	"	W. J. Watts....	"
22	Michigan Standard Coal Co.....	Huron.....	T. B. Konkel....	Sebewaing.
23	Corunna Coal Co.....	Shiawassee..	Tod Kincaid....	Owosso.
24	Owosso Coal Co.....	"	R. E. Travis....	"
25	New Hope Coal Co.....	Jackson.....	Geo. Jenkins....	Jackson.
26	Jackson Coal Co.....	"	W. F. Ward....	"
27	Grand Ledge Coal Co.....	Eaton.....	Fargo Boyle....	Grand Ledge.
28	Arnold Mine.....	"	V. Allen.....	"
29	Eagle Coal Mine.....	"	R. H. Pratt....	"
30	Hodge Mine.....	"	C. L. Hodge....	"
31	Wilkinson Mine.....	"	R. F. Wilkinson..	"

SUMMARY.

The 17th annual report from this bureau gave a detailed history of the coal fields and mines of Michigan. Since that time the industry has been constantly increasing. New mines have been opened and the market extended. From the best authority it is known that the product of the Michigan coal mines takes first rank as a bituminous coal. The industry is yet in its infancy and a few years will witness great developments in the production of this indispensable product.

THE INSPECTION LAW OF 1899.

The inspection law of 1899 gave the Commissioner of Labor authority to collect certain statistics relating to labor, wages, products, coal, etc., which had never before been gathered, and which form an interesting chapter on the economic question of this great and growing industry.

SOME OF THE STATISTICS.

For the year ending December 1, an average of 25 mines have been in operation, there being 31 taking out coal at that date. These mines are principally located in the Saginaw valley, although Shiawassee county has two, Jackson county two, and there are five small drift mines near Grand Ledge, in Eaton county, these latter being operated by only a few employes, using no powder and but little oil, the owners generally working with the men in taking out coal. These five mines have averaged about 540 tons per month.

NUMBER OF EMPLOYEES.

The monthly reports from the managers of the mines show an aggregate of 1,638 employes at work, an average of 62 for each mine, although three of the mines have over 150 employes all the time, several others approximating 90 employes each.

HOURS WORKED PER DAY.

A large per cent of the miners are paid by the ton for their work, their working days averaging only a little over seven hours each. Of course "surface men" and certain other employes average more than this, but in no case do they exceed 10 hours per day.

DAYS PER MONTH.

While 26 days is recognized as a month's work at most kinds of employment, the miners for certain reasons, acceptable to operators and employes, only average 21½ days each month, work under ground being of such a nature as to preclude constant employment.

DAILY WAGES OF EMPLOYEES.

The aggregate daily wages paid to the employes of these mines average \$38,329.92, or an average of \$2.34 paid each employe per day. The average daily wage of the employes of many of the larger mines is over \$2.50. It is noticeable that in some of the mines in the heart of the mining district the wages approximate \$2.90 per day.

ILLUMINATING OIL USED.

All the mines use more or less illuminating oil, those before mentioned at Grand Ledge using but a small amount. The consumption of oil for the 31 mines for the year aggregated 19,006 gallons, or 1,588 gallons for each month, being an average of about 51 gallons for each mine. Ten of the largest mines average about 125 gallons each per month.

BLASTING POWDER USED.

All the mines except the five at Grand Ledge use blasting powder, the aggregate amount used during the year being 36,553 kegs of 25 pounds each, the average for each mine using powder being 1,783 kegs. A total of 913,835 pounds, or an average of 44,575 pounds for each mine using powder. In the month of November 10 of these mines used an aggregate of 60,425 pounds of powder, an average of 6,043 pounds for each mine.

TONS OF COAL MINED.

For the year covered by this report there were 843,476 tons of coal mined in Michigan, a monthly average of 70,290 each month, or a monthly average of 2,267 tons for each mine. This average is for all mines, large and small. In the month of November 10 of the largest mines took out 63,102 tons, an average of 6,310 each. One mine took out 13,012 tons.

COST OF OUTPUT.

The total cost of the entire output of these 31 mines for the year was \$1,164,000 or a monthly average of \$97,000. The monthly average for each mine is \$3,130. Ten of the largest mines paid out in the month of November \$86,415.37. The average cost per ton for the entire 31 mines is about \$1.38, although it has cost some mines as high as \$2.00 per ton to take out the coal.

NEW MINES OPENED.

Within the past three months eight new mines have been put in operation and are now taking out coal, and it is probable that the coming year will see 40 mines in operation. Some of the new mines will be operated on an extensive scale.

THE OUTLOOK FOR THE FUTURE.

The outlook for coal mining in Michigan is very bright. The superior quality of the coal; the cheapness of transportation, and the vast fields yet untouched, all combine to attract attention to the possibilities of what is yet in store for this great product of the State. If the present prosperous condition of the country continues, and mills and factories are kept in operation, the demand for Michigan coal will create a wonderful development in this great industry. Michigan mills and factories can be operated by her home product. This is a most important factor in the salt and beet sugar industries.

STATISTICAL TABLE.

The following table shows the output and cost of coal from the Michigan mines for the year ending December 1, 1900, consolidated from the monthly reports of the operators. The deductions which follow will be found interesting data for reference.

*Consolidated monthly reports.—Output of Michigan coal for the year ending
December 1st, 1900.*

Line number.	Months.	Number of mines in operation.	Average number of men employed during the month.	Average number of hours worked per day.	Average number of days worked per month.	Average daily wages.	Average number of gallons of illuminating oils used.	Number of mines using powder.	Average number of kegs of powder used.	Aggregate number of tons of coal mined.	Aggregate cost of output.	Average cost per ton.
1	December.....	26	1,483	7.6	22.3	\$2 06	1,685	20	2,629	68,014	\$82,438	\$1 21
2	January.....	27	1,578	7.7	23.9	2 08	1,799	21	2,991	74,884	93,086	1 24
3	February.....	27	1,767	7.7	21.7	2 08	1,886	21	2,853	70,732	89,709	1 27
4	March.....	26	1,813	7.7	23.1	2 16	1,850	20	5,062	79,413	99,354	1 25
5	April.....	26	1,670	7.6	20.4	2 65	1,400	20	4,040	65,236	96,675	1 48
6	May.....	25	1,581	7.7	19.3	2 52	1,297	19	2,345	58,641	89,226	1 52
7	June.....	24	1,576	7.9	20.4	2 49	1,306	20	2,652	63,207	92,848	1 47
8	July.....	25	1,450	7.8	19.3	2 49	1,319	20	2,460	64,415	92,848	1 44
9	August.....	25	1,485	7.7	20.7	2 44	1,356	20	2,875	69,066	102,746	1 49
10	September.....	24	1,604	7.7	21.8	2 39	1,489	19	2,735	61,689	98,358	1 59
11	October.....	25	1,612	7.8	23.5	2 35	1,712	20	2,963	84,834	109,205	1 29
12	November.....	31	2,038	7.8	22.6	2 43	1,907	26	2,928	83,345	117,498	1 41
Totals and averages.			19,657	7.7	21.5	\$2 34	19,006	20.5	36,553	843,476	\$1,164,000	\$1 38

DEDUCTIONS.

Number of mines in operation December 1, 1900.....	31
Average number of mines in operation during the year.....	25
Average number of persons employed monthly in all mines.....	1,638
Average number for each mine.....	53
Average number employed in ten largest mines.....	1,430
Average number of hours worked per day.....	7.7
Average number of days worked per month.....	21.5
Aggregate daily wages for employes.....	\$3,832 92
Average daily wage for each employe.....	2 34
Aggregate number of gallons oil used yearly.....	19,006
Average for each month.....	1,584
Average for each mine monthly.....	51
Average number of mines using powder.....	20.5
Number kegs powder used yearly.....	36,553
Average for each month.....	3,046
Average monthly for each mine using powder.....	149
Aggregate number tons coal mined.....	843,476
Average for each month.....	70,290
Average monthly for each mine.....	2,267
Aggregate cost of yearly output.....	\$1,164,000 00
Average cost per month for all mines.....	97,000 00
Average cost per month for each mine.....	3,130 00
Average cost per ton for entire output.....	1 38

It will be seen that all mines are included in these averages, but a careful reading of the report will show the great magnitude the larger mines have assumed. The opening of new mines, and the increased output, indicates that the cost of the product of Michigan coal mines now exceeds \$100,000 monthly.

LABOR CANVASS FOR 1900

DATA SHOWING THE DETAILS OF THE CANVASS

Canvass of Male Laborers, Employments, Average Ages, Social Condition, Number Dependent, Homes, Etc.

CANVASS OF FEMALE EMPLOYES WITH DATA

STATISTICS OF MALE EMPLOYES.

During the season of 1900 special canvassers interviewed 4,800 male employes. They were employed in 34 different cities and villages, widely located in the lower peninsula. The number canvassed for each town with the data given follows:

ADRIAN.

Number canvassed, 310; average age 32 years; 274 were native born, and 36 were foreign born; 176 were married, 122 were single and 12 widowed; the 188 married and widowed have 320 children; the 310 canvassed have 780 to support, including themselves; they had averaged 9 years each at their work; averaging 9.9 hours per day and 11.7 months per year; all have steady employment; 82 own their homes, 45 of which were free from encumbrance; 99 rented their homes, paying an average of \$7.36 monthly rental; 129 hired their board, paying an average of \$2.83 each per week; 221 could save something from their earnings over and above the cost of living and 89 could not so save. They were paid as follows: Eight superintendents, \$4.00 each per day; 13 foremen, \$2.62 each per day; 24 book-keepers and office clerks, \$1.94 each per day; five shipping clerks, \$1.65 each per day; two salesmen, \$3.37 each per day; one draughtsman, \$2.50 per day; 25 machinists, \$2.08 each per day; 17 engineers, \$1.93 each per day; one fireman, \$1.50 per day; ten blacksmiths, \$2.10 each per day; six carpenters, \$1.83 each per day; two pattern makers, \$2.13 each per day; seven moulders, \$1.93 each per day; eight plumbers, etc., \$1.50 each per day; one core maker, \$1.50 per day; eight painters, \$1.61 each per day; 27 at cabinet work, \$1.85 each per day; 11 finishers, \$1.61 each per day; three polishers, \$1.83 each per day; nine at machine wood work, \$1.74 each per day; 28 machine hands, \$1.56 each per day; 22 at factory work, \$1.85 each per day; three helpers, \$1.38 each per day; 37 laborers, \$1.27 each per day; 30 apprentices, 70 cents each per day; two broom makers, \$1.50 each per day. Total 310, average \$1.75 each per day.

ALBION.

Number canvassed, 235; average age 29 years; 177 were native born and 58 were foreign born; 123 were married, 108 were single and 4 widowed; the 127 married and widowed have 231 children; the 235 canvassed have 563 to support, including themselves; they have averaged 8.4 years at their work, averaging 10 hours per day and 10.5 months per year; all have steady employment; 48 own their homes, 31 of which were

free from encumbrance; 71 rented their homes, paying an average of \$6.24 monthly rental; 116 hired their board, paying an average of \$2.75 each per week; 131 could save something from their earnings over and above the cost of living, and 104 could not so save. They were paid as follows: Two superintendents, \$3.50 each per day; 2 foremen, \$2.50 each per day; 1 bookkeeper, \$2.50 per day; 4 machinists, \$1.88 each per day; 3 engineers, \$1.91 each per day; 1 millwright, \$3.00 per day; 7 printers, \$1.70 each per day; 6 carpenters, \$1.87 each per day; 6 patternmakers, \$2.22 each per day; 58 molders, \$1.69 each per day; 5 core makers, \$1.10 each per day; 1 blacksmith, \$2.00 per day; 4 millers, \$1.94 each per day; 3 packers, \$1.68 each per day; 5 trimmers, \$2.05 each per day; 8 painters, \$1.94 each per day; 2 machine wood workers, \$1.62 each per day; 13 cigarmakers, \$1.57 each per day; 10 coopers, \$1.33 each per day; 3 firemen, \$1.50 each per day; 3 at laundry work, \$1.75 each per day; 1 helper, \$1.50 per day; 15 laborers, \$1.40 each per day; 48 apprentices, 78 cents each per day; 21 store clerks, \$1.50 each per day; 1 plumber, \$2.50 per day; 2 tinnners, \$1.38 each per day. Total 235, average \$1.51 each per day.

ATHENS.

Number canvassed, 12; average age 39 years; 11 were native born and one foreign born; 9 were married and three were single; the 9 married had 22 children; the 12 had 43 to support, including themselves; they had averaged 9.3 years at this work, averaging 11.1 hours per day, and 9.8 months per year; all have steady employment; 4 own their homes, 2 of which were free from encumbrance; 6 rented their homes, paying an average of \$5.50 monthly rental; 2 hired their board, paying an average of \$2.50 each per week; 7 could save something from their earnings over and above their cost of living, and 5 could not so save. They were paid as follows: Three masons, \$3.00 each per day; 4 store clerks, \$1.48 each per day; 5 laborers, \$1.40 each per day. Total 12, average \$1.84 each per day.

BATTLE CREEK.

Number canvassed, 720; average age 32 years; 630 were native born and 90 were foreign born; 428 were married, 283 were single and 9 widowed; the 437 married and widowed had 739 children; the 720 canvassed had 1,866 to support, including themselves; they had averaged 10.5 years each at their work, averaging 10.2 hours per day and 11.4 months per year; all have steady employment; 176 own their homes, 70 of which were free from encumbrance; 263 rented their homes, paying an average of \$7.22 monthly rental; 281 hired their board, paying an average of \$3.47 each per week; 502 could save something from their earnings over and above the cost of living and 218 could not so save. They were paid as follows: Seven superintendents, \$3.44 each per day; 19 foremen, \$2.54 each per day; 13 artists, etc., \$2.24 each per day; 24 bookkeepers, and office clerks, \$1.96 each per day; 5 shipping clerks, \$1.61 each per day; 84 store clerks, \$1.86 each per day; 100 printing and bookbinding, \$1.77 each per day; 99 machinists, \$2.16 each per day; 5 plumbers, etc., \$2.07 each per day; 13 carpenters, \$1.90 each per day; 11 blacksmiths, \$2.31 each per day; 8 boiler makers, \$2.01 each per day; 7 masons, \$3.00

each per day; 10 engineers, \$1.69 each per day; 1 fireman \$1.50 per day; 3 pattern makers, \$2.17 each per day; 6 core makers, \$1.78 each per day; 9 tinsmiths, \$2.01 each per day; 19 molders, \$2.34 each per day; 7 painters, \$1.77 each per day; 3 harness makers, \$1.41 each per day; 11 barbers, \$1.59 each per day; 17 cigar makers, \$1.94 each per day; 2 motormen, \$1.55 each per day; 10 wood workers, \$1.90 each per day; 9 butchers, \$1.71 each per day; 40 health food, \$1.55 each per day; 3 helpers, \$1.37 each per day; 63 laborers, \$1.41 each per day; 106 apprentices, 97 cents each per day; 6 miscellaneous, \$1.69 each per day. Total 720, average \$1.77 each per day.

BENTON HARBOR.

Number canvassed, 480; average age 34 years; 389 were native born and 91 were foreign born; 281 were married, 177 were single and 22 widowed; the 303 married and widowed had 565 children; the 480 canvassed had 1,277 to support, including themselves; they had averaged 10.6 years each at their work, averaging 10.4 hours per day, and 10.6 months per year; all have steady employment; 112 own their homes, 64 of which were free from encumbrance; 193 rented their homes, paying an average of \$6.47 monthly rental; 175 hired their board, paying an average of \$3.24 each per week; 317 could save something from their earnings over and above the cost of living; 163 could not so save. They paid as follows: Three superintendents, \$4.71 each per day; 29 foremen, \$2.25 each per day; 6 shipping clerks, \$1.88 each per day; 49 store clerks, \$1.87 each per day; 1 designer, \$3.20 per day; 13 printers, \$1.46 each per day; 7 masons, \$2.86 each per day; 6 blacksmiths, \$1.94 each per day; 5 plumbers, etc., \$2.35 each per day; 5 tailors, \$2.05 each per day; 20 engineers, \$1.99 each per day; 5 tinsmiths, \$1.95 each per day; 9 machinists, \$1.94 each per day; 2 molders, \$2.25 each per day; 13 painters, \$1.94 each per day; 3 coopers, \$1.50 each per day; 2 wagon makers, \$1.63 each per day; 20 wood workers, \$1.62 each per day; 10 cabinet makers, \$1.64 each per day; 33 carpenters, \$2.03 each per day; 26 rail wood work, \$1.65 each per day; 5 butchers, \$1.50 each per day; 14 cigar makers, \$2.02 each per day; 49 at factory work, \$1.57 each per day; 2 machine hands, \$1.87 each per day; 8 teamsters, \$1.61 each per day; 6 barbers, \$1.49 each per day; 2 marble cutters, \$1.62 each per day; 87 laborers, \$1.29 each per day; 28 apprentices, 83 cents each per day; 11 miscellaneous, \$1.72 each per day. Total 480, average \$1.70 each per day.

CHILSEA.

Number canvassed, 19; average age 41 years; 5 were native born and 14 foreign born; 14 were married and 5 single; the 14 married had 38 children; the 19 canvassed had 69 to support including themselves; they had averaged 18 years each at their employment, averaging 10 hours per day and 10 months per year; all had steady employment; 8 owned their homes, 5 of which were free from encumbrance; 6 rented their homes, paying an average of \$5.20 monthly rental; 5 hire their board, paying an average of \$3.25 each per week; 17 could save something from their earnings over and above the cost of living, and 2 could not so save. They paid as follows: Four masons, \$2.19 each per day;

2 blacksmiths, \$1.63 each per day; 3 carpenters, \$1.83 each per day; 3 shoe makers, \$1.50 each per day; 1 wagon maker, \$1.75 per day; 2 painters, \$2.00 each per day; 1 molder, \$2.00 per day; 1 cooper, \$1.50 per day; 1 cigar maker, \$2.00 per day; 1 at laundry work, \$2.00 per day. Total 19, average \$1.85 each per day.

CLINTON.

Number canvassed, 57; average age 26 years; all were native born; 21 were married and 36 were single; the 21 married have 42 children; the 57 canvassed have 120 to support, including themselves; they had averaged 6 years each at their work, averaging 10.2 hours per day and 12 months per year; all have steady employment; 9 own their homes, three of which were free from encumbrance; 12 rented their homes, paying an average of \$5.25 monthly rental; 36 hired their board, paying an average of \$2.28 each per week; 29 could save something from their earnings over and above the cost of living, and 28 could not so save. They were all employed in woolen mills and were paid as follows: Two at \$2.00 each per day; one at \$1.75 per day; 3 at \$1.50 each per day; 3 at \$1.38 each per day; 8 at \$1.25 each per day; 2 at \$1.10 each per day; 38 at \$1.00 each per day. Total 57, average \$1.13 each per day.

COLUMBIAVILLE.

Number canvassed, 39; average age 30 years; 28 were native born and 11 were foreign born; 25 were married, 13 were single and 1 widowed; the 26 married and widowed have 39 children; the 39 canvassed have 96 to support, including themselves; they had averaged 6 years each at their work, averaging 10 hours per day and 12 months per year; all have steady employment; 6 own their homes, all of which were free from encumbrance; 19 rented their homes, paying an average of \$6.50 monthly rental; 14 hired their board, paying an average of \$1.84 each per week; 14 could save something from their earnings over and above the cost of living, and 25 could not so save. They were all employed in woolen mills and were paid as follows: Two foremen, \$2.38 each per day; 2 at \$2.00 each per day; 1 at \$1.75 per day; 2 at \$1.50 each per day; 8 at \$1.25 each per day; 17 at \$1.00 each per day; 5 at 75 cents each per day. Total 39, average \$1.17 each per day.

COLDWATER.

Number canvassed, 160; average age 31 years; 141 were native born and 19 were foreign born; 85 were married, 72 were single and 3 widowed; the 88 married and widowed have 138 children; the 160 canvassed have 372 to support including themselves; they had averaged 12 years each at their work, averaging 10.1 hours per day and 11 months per year; all have steady employment; 34 own their homes, 23 of which were free from incumbrance; 49 rented their homes, paying an average of \$6.88 monthly rental; 77 hired their board, paying an average of \$2.68 each per week; 103 could save something from their earnings over and above the cost of living, and 57 could not so save. They were paid as follows: Two superintendents, \$3.50 each per day; 8 foremen, \$2.68 each per day; 2 shipping clerks, \$1.70 each per day; 1 artist, \$2.25 per day; 1 machinist, \$2.00 per day; 11 engineers, \$1.68 each per day; 1 fireman,

\$1.33 per day; 5 millers, \$1.75 each per day; 9 molders, \$2.56 each per day; 2 cupola tenders, \$1.46 each per day; 2 painters, \$1.75 each per day; 2 polishers, \$1.16 each per day; 10 machine hands, \$1.53 each per day; 42 in shoe factory, \$1.64 each per day; 10 packers, \$1.45 each per day; 13 wood workers, \$1.48 each per day; 3 machine wood workers, \$1.67 each per day; 3 cigar makers, \$1.42 each per day; 6 at laundry work, \$1.68 each per day; 4 helpers, \$1.31 each per day; 6 laborers, \$1.25 each per day; 17 apprentices, 76 cents each per day. Total 160, average \$1.62 each per day.

DUNDEE.

Number canvassed, 13; average age 38 years; 12 were native born and 1 foreign born; 7 were married, 4 were single and 2 widowed; the 9 married and widowed have 10 children; the 13 canvassed have 31 to support, including themselves; they had averaged 17 years each at their work; averaging 10 hours per day and 10.6 months per year; all have steady employment; 5 own their homes, all of which were free from encumbrance; 3 rented their homes, paying an average of \$5.67 monthly rental; 5 hired their board, paying an average of \$3.10 each per week; 9 could save something from their earnings over and above the cost of living, and 4 could not so save. They were paid as follows: 1 photographer, at \$2.00 per day; 6 carpenters, \$1.83 each per day; 4 blacksmiths, \$1.94 each per day; 1 harness maker, \$2.00 per day; 1 wagon maker, \$2.00 per day. Total 13, average \$1.90 each per day.

DEXTER.

Number canvassed, 13; average age 45 years; 11 were native born and 2 were foreign born; 9 were married and 4 were single; the 9 married have 29 children; the 13 canvassed have 45 to support, including themselves; they have averaged 1.9 years each at their work, averaging 10 hours per day, and 9.5 months per year; all have steady employment; 6 own their homes, 5 of which were free from encumbrance; 2 rented their homes, paying an average of \$5.20 monthly rental; 2 hired their board, paying an average of \$3.00 each per week; 11 could save something out of their earnings over and above the cost of living, and 2 could not so save. They were paid as follows: Three masons, \$2.83 each per day; 1 carpenter, \$2.25 per day; 4 painters, \$1.88 each per day; 1 tailor, \$2.00 per day; 3 harness makers, \$1.67 each per day; 1 cigar maker, \$1.75 per day. Total 13, average \$2.07 each per day.

EATON RAPIDS.

Number canvassed, 13; average age 22 years; all were native born; 5 were married and 8 were single; the 5 married have 3 children; the 13 canvassed have 22 to support, including themselves; they had averaged 3 years each at their work, averaging 10 hours per day, and 11.4 months per year; all have steady employment; 1 owns his home, which is not free from encumbrance; 4 rented their homes, paying an average of \$3.00 monthly rental; 8 hire their board, paying an average of \$2.40 each per week; 4 could save something from their earnings over and above the cost of living, and 9 could not so save; all were employed in woolen mills and were paid as follows: Three at \$1.25 each per day;

1 at \$1.10 per day; 3 at 85 cents each per day; 6 at 50 cents each per day. Total 13, average 80 cents each per day.

FLINT.

Number canvassed, 14; average age 38 years; 13 were native born and 1 was foreign born; 11 were married and 3 were single; the 11 married have 28 children; the 14 canvassed have 56 to support, including themselves; they had averaged 14 years at their work, averaging 10 hours per day and 12 months per year; all had steady employment; 3 own their homes, all of which were free from encumbrance; 9 rented their homes, paying an average of \$6.12 monthly rental; 2 hired their board, paying an average of \$2.75 each per week; 7 could save something from their earnings over and above the cost of living, and 7 could not so save. All were employed in woolen mills and were paid as follow: One at \$2.50 per day; 1 at \$2.25 per day; 2 at \$2.00 each per day; 2 at \$1.37 each per day; 4 at \$1.25 each per day; 4 at \$1.00 each per day. Total 14, average \$1.47 each per day.

GRAND HAVEN.

Number canvassed, 96; average age 27 years; 78 were native born and 18 were foreign born; 39 were married, 56 were single and 1 widowed; the 40 married and widowed have 105 children; the 96 canvassed have 241 to support including themselves; they had averaged 5 years at their work, averaging 10 hours per day and 11.8 months per year; all have steady employment; 18 own their homes, 9 of which were free from encumbrance; 20 rented their homes, paying an average of \$4.48 monthly rental; 58 hired their board, paying an average of \$2.24 each per week; 18 could save something from their earnings over and above the cost of living, and 78 could not so save. They were paid as follows: One superintendent, \$2.75 per day; 1 foreman, \$3.00 per day; 2 engineers, \$1.50 each per day; 3 machinists, \$1.42 each per day; 3 sawyers, \$1.67 each per day; 5 finishers, \$1.33 each per day; 5 coopers, \$1.63 each per day; 5 cabinet makers, \$1.56 each per day; 12 wood workers, \$1.42 each per day; 9 factory work, \$1.26 each per day; 20 laborers, \$1.10 each per day; 30 apprentices, 68 cents each per day. Total 96; average \$1.16 each per day.

GRAND LEDGE.

Number canvassed, 64; average age 28 years; 58 were native born and 6 were foreign born; 39 were married, 23 were single and 2 widowed; the 41 married and widowed have 67 children; the 64 canvassed have 171 to support, including themselves; they had averaged 5 years each at their work, averaging 10 hours per day and 11.9 months per year; all have steady employment; 19 own their homes, 17 of which were free from encumbrance; 20 rented their homes, paying an average of \$5.55 monthly rental; 25 hired their board, paying an average of \$2.35 each per week; 20 could save something from their earnings over and above the cost of living, and 40 could not so save. They were paid as follows: One superintendent, \$3.50 per day; 1 foreman, \$2.50 per day; 1 shipping clerk, \$1.25 per day; 2 at cabinet work, \$1.38 each per day; 6 finishers, \$1.23 each per day; 4 varnishers, \$1.37 each per day; 24 wood workers, \$1.48 each per day; 3 filers, \$1.21 each per day; 6 laborers, \$1.21 each per

day; 16 apprentices, 76 cents each per day. Total 64, average \$1.27 each per day.

GREENVILLE.

Number canvassed, 54; average age 30 years; 45 were native born and 9 were foreign born; 25 were married and 29 were single; the 25 married had 65 children; the 54 canvassed have 146 to support, including themselves; they had averaged 3 years each at their work, averaging 8.1 hours per day and 11.4 months per year; all have steady employment; 17 own their homes, 14 of which were free from encumbrance; 15 rented their homes, paying an average of \$4.83 monthly rental; 22 hired their board, paying an average of \$3.10 each per week; 31 could save something from their earnings over and above the cost of living, and 23 could not so save. All were in refrigerator factory and were paid as follows: 5 foremen, \$2.29 each per day; 4 at \$2.00 each per day; 5 at \$1.75 each per day; 3 at \$1.60 each per day; 5 at \$1.50 each per day; 4 at 1.35 each per day; 9 at \$1.25 each per day; 7 at \$1.10 each per day; 7 at \$1.00 each per day; 3 at 90 cents each per day; and 2 at 75 cents each per day. Total 54, average \$1.41 each per day.

HOLLY.

Number canvassed, 38; average age 26 years; 37 were native born and one was foreign born; 16 were married, 21 were single and 1 widowed; the 17 married and widowed have 25 children; the 38 canvassed have 78 to support, including themselves; they had averaged 5 years each at their work, averaging 10 hours per day and 12 months per year; all have steady employment; 8 own their homes, 6 of which were free from encumbrance; 8 rented their homes, paying an average of \$5.31 monthly rental; 22 hired their board, paying an average of \$2.50 each per week; 14 could save something from their earnings over and above the cost of living, and 24 could not so save. They were paid as follows: One foreman at \$2.25 per day; 5 machinists, \$1.53 each per day; 1 plumber, at \$2.25 per day; 1 painter, at \$1.66 per day; 3 machine hands, \$1.17 each per day; 10 wood workers, \$1.27 each per day; 1 teamster, \$1.00 per day; 5 laborers, \$1.35 each per day; 11 apprentices, 88 cents each per day. Total 38, average \$1.23 each per day.

HOWELL.

Number canvassed, 31; average age 35 years; 29 were native born and 2 were foreign born; 26 were married, 4 were single and 1 widowed; the 27 married and widowed have 40 children; the 31 canvassed have 89 to support, including themselves; they have averaged 7 years each at their work, averaging 10 hours per day and 12 months per year; all have steady employment; 20 own their homes, 8 of which were free from encumbrance; 6 rented their homes, paying an average of \$6.21 monthly rental; 5 hired their board, paying an average of \$2.90 each per week; 19 could save something from their earnings over and above the cost of living, and 12 could not so save. They were paid as follows: Two foremen, \$2.55 each per day; 3 inspectors, \$1.67 each per day; 2 bookkeepers and office clerks, \$1.75 each per day; 2 machinists, \$2.00 each per day; 1 engineer at \$2.00 per day; 1 tinsmith, \$2.00 per

day; 1 painter, \$1.50 per day; 1 machine hand, \$1.25 per day; 16 laborers, \$1.28 each per day; 2 apprentices, \$1.00 each per day. Total 31, average \$1.48 each per day.

HILLSDALE.

Number canvassed, 74; average age 30 years; 69 were native born and 5 were foreign born; 50 were married, 21 were single, 3 widowed; the 53 had 100 children; the 74 canvassed had 205 to support, including themselves; they had averaged 14 years each at their work, averaging 9.4 hours per day and 10.1 months per year; all have steady employment; 26 own their homes, 15 of which were free from encumbrance; 24 rented their homes, paying an average of \$6.85 monthly rental; 24 hired their board, paying an average of \$2.58 each per week; 43 could save something from their earnings over and above the cost of living, and 31 could not so save. They were paid as follows: One superintendent, \$5.00 per day; 2 foremen, \$3.75 each per day; 1 shipping clerk, \$2.50 per day; 2 machinists, \$2.25 each per day; 3 engineers, \$1.75 each per day; 2 firemen, \$1.25 each per day; 3 wood workers, \$1.83 each per day; 6 carpenters, \$1.79 each per day; 2 blacksmiths, \$1.88 each per day; 5 printers, \$1.56 each per day; 7 millers, \$1.64 each per day; 1 cupola tender, \$1.50 per day; 1 molder, \$2.50 per day; 7 coopers, \$1.34 each per day; 1 painter, \$1.75 per day; 7 wood machine workers, \$1.25 each per day; 1 machine hand, \$1.25 per day; 5 packers, \$1.45 each per day; 1 helper, \$1.25 per day; 13 laborers, \$1.15 each per day; 3 apprentices, 92 cents each per day. Total 74, average \$1.51 each per day.

JACKSON.

Number canvassed, 72; average age 28 years; 62 were native born and 10 were foreign born; 31 were married, 39 were single and 2 widowed; the 33 married and widowed have 38 children; the 72 canvassed have 147 to support, including themselves; they had averaged 7 years each at their work, averaging 10 hours per day and 12 months per year; all have steady employment; 13 own their homes, 12 of which were free from encumbrance; 14 rented their homes, paying an average of \$10.64 monthly rental; 45 hired their board, paying an average of \$2.89 each per week; 40 could save something from their earnings over and above the cost of living, and 32 could not so save. They were paid as follows: Three superintendents, \$4.50 each per day; 1 foreman \$3.33 per day; 1 draughtsman, \$2.25 per day; 8 bookkeepers and office clerks, \$2.17 each per day; 3 shipping clerks, \$1.63 each per day; 4 machinists, \$2.88 each per day; 1 pattern maker, \$2.00 per day; 2 engineers, \$2.25 each per day; 2 printers, \$1.63 each per day; 1 blacksmith, \$2.50 per day; 3 molders, \$2.17 each per day; 25 at factory work, \$1.71 each per day; 4 laborers, \$1.38 each per day; 14 apprentices, 74 cents each per day. Total 72, average \$1.82 each per day.

JONESVILLE.

Number canvassed, 63; average age 34 years; 62 were native born and 1 foreign born; 39 were married, 23 were single and one widowed; the 40 married and widowed have 59 children; the 63 canvassed have 158 to support, including themselves; they have averaged 11 years each

at work; averaging 9.9 hours per day and 11.9 months per year; all have steady employment; 31 own their homes, 16 of which were free from encumbrance; 8 rented their homes, paying an average of \$6.16 monthly rental; 24 hired their board, paying an average of \$2.38 each per week; 48 could save something from their earnings over and above the cost of living, and 15 could not so save. They were paid as follows: Two superintendents, \$2.50 each per day; 1 foreman, \$2.80 per day; 1 bookkeeper \$2.40 per day; 1 shipping clerk, \$2.00 per day; 3 store clerks, \$1.17 each per day; 10 painters, \$1.64 each per day; 3 printers, \$2.11 each per day; 3 engineers, \$1.75 each per day; 11 blacksmiths, \$1.70 each per day; 2 millers, \$1.38 each per day; 2 tanners, \$1.83 each per day; 5 wood workers, \$1.76 each per day; 2 trimmers, \$1.83 each per day; 1 harness maker, \$1.75 per day; 2 cigar makers, \$1.50 each per day; 1 helper, \$1.25 per day; 13 apprentices, 71 cents each per day. Total 63, average \$1.53 each per day.

KALAMAZOO.

Number canvassed, 600; average age 31 years; 419 were native born and 181 were foreign born; 321 were married, 265 were single and 14 widowed; the 335 married and widowed have 642 children; the 600 canvassed have 1,494 to support, including themselves; they had averaged 8 years each at their work, averaging 9.9 hours per day and 11.9 months per year; all had steady employment; 147 own their homes, 89 of which were free from encumbrance; 173 rented their homes, paying an average of \$7.83 monthly rental; 280 hired their board, paying an average of \$2.92 each per week; 312 could save something from their earnings over and above the cost of living, and 288 could not so save. They were paid as follows: Six managers, \$6.50 each per day; 8 superintendents, \$3.99 each per day; 31 foremen, \$2.91 each per day; 21 bookkeepers and office clerks, \$2.47 each per day; 8 shipping clerks, \$1.56 each per day; 1 designer, \$4.00 per day; 1 store clerk, \$1.25 per day; 2 machinists, \$2.00 each per day; 7 engineers, \$1.97 each per day; 1 fireman, \$1.50 per day; 21 blacksmiths, \$2.11 each per day; 17 carpenters, \$1.50 each per day; 31 printers and book binders, \$1.66 each per day; 27 tailors and cutters, \$1.89 each per day; 32 painters, \$2.04 each per day; 5 polishers, \$2.14 each per day; 67 at wheel work, \$1.40 each per day; 5 at leather work, \$1.87 each per day; 13 wood workers, \$1.42 each per day; 42 carriage makers, \$1.80 each per day; 1 cabinet maker, \$2.00 per day; 65 machine hands, \$1.36 each per day; 60 at factory work, \$1.46 each per day; 13 helpers, \$1.31 each per day; 30 laborers, \$1.12 each per day; 85 apprentices, 79 cents each per day. Total 600, average \$1.68 each per day.

LANSING.

Number canvassed, 840; average age 32 years; 668 were native born and 172 were foreign born; 526 were married, 304 were single, and 10 widowed; the 536 married and widowed have 996 children; the 840 canvassed have 2,258 to support, including themselves; they have averaged 10 years each at their work, averaging 9.8 hours per day and 11.2 months per year; all have steady employment; 222 own their homes, 95 of which were free from encumbrance; 291 rented their homes, paying an average of \$7.14 monthly rental; 327 hired their board, paying an

average of \$3.00 each per week; 552 could save something from their earnings over and above the cost of living, and 288 could not so save. They were paid as follows: Thirteen superintendents, \$3.80 each per day; 16 foremen, \$2.70 each per day; 4 inspectors, \$1.75 each per day; 18 bookkeepers and office clerks, \$1.87 each per day; 3 artists, \$3.08 each per day; 13 salesmen, \$1.97 each per day; 7 shipping clerks, \$1.66 each per day; 65 machinists, \$2.22 each per day; 18 engineers, \$1.84 each per day; 3 firemen, \$1.58 each per day; 22 blacksmiths, \$2.00 each per day; 22 carpenters, \$1.77 each per day; 18 painters, \$1.79 each per day; 6 pattern makers, \$2.08 each per day; 4 core makers, \$1.38 each per day; 2 boiler makers, \$2.50 each per day; 8 masons, \$2.88 each per day; 98 printers and bookbinders, \$2.02 each per day; 23 tailors and cutters, \$2.29 each per day; 9 finishers, \$1.84 each per day; 4 tinnermen, \$1.63 each per day; 3 packers, \$1.58 each per day; 16 wood workers, \$1.60 each per day; 13 polishers and glaziers, \$2.21 each per day; 15 cabinet makers, \$1.87 each per day; 5 carriage makers, \$1.90 each per day; 24 molders, \$2.19 each per day; 57 machine hands, \$1.55 each per day; 36 cigar makers, \$2.13 each per day; 1 miller, \$1.75 per day; 1 knitter, \$1.50 per day; 2 trimmers, \$1.75 each per day; 4 box makers, \$1.39 each per day; 10 laundrymen, \$1.63 each per day; 7 yard men, \$1.47 each per day; 6 teamsters, \$1.39 each per day; 23 helpers, \$1.40 each per day; 126 laborers, \$1.25 each per day; 104 apprentices, 89 cents each per day; 11 miscellaneous, \$1.59 each per day. Total 840, average \$1.74 each per day.

MARSHALL.

Number canvassed, 147; average age 32 years; 136 were native born and 11 were foreign born; 74 were married, 72 were single and 1 widowed; the 75 married and widowed have 160 children; the 147 canvassed have 386 to support, including themselves; they had averaged 12 years at their work, averaging 9.7 hours per day and 10.9 months per year; all have steady employment; 39 own their homes, 29 of which were free from encumbrance; 44 rented their homes, paying an average of \$6.80 monthly rental; 64 hired their board, paying an average of \$3.05 each per week; 96 could save something from their earnings over and above the cost of living, and 51 could not so save. They were paid as follows: One superintendent, \$4.20 per day; 3 foremen, \$2.67 each per day; 3 office clerks, \$2.28 each per day; 3 shipping clerks, \$1.83 each per day; 25 store clerks, \$1.57 each per day; 2 printers, \$2.00 each per day; 3 engineers, \$1.37 each per day; 8 machinists, \$1.81 each per day; 3 tinnermen, \$1.83 each per day; 9 blacksmiths, \$1.92 each per day; 1 plumber, \$2.88 per day; 12 painters, \$1.55 each per day; 2 telegraph operators, \$1.88 each per day; 1 harness maker, \$1.50 per day; 1 butcher, \$1.38 per day; 1 wagon maker, \$1.25 per day; 1 jeweler, \$2.00 per day; 6 trimmers, \$1.83 each per day; 6 cigar makers, \$2.17 each per day; 2 barbers, \$1.58 each per day; 18 wood workers, \$1.68 each per day; 9 laborers, \$1.24 each per day; 27 apprentices, 74 cents each per day. Total 147, average \$1.55 each per day.

MASON.

Number canvassed, 29; average age 37 years; 27 were native born and 2 were foreign born; 19 were married, 9 were single and 1 widowed; the 20 married and widowed have 24 children; the 29 canvassed have 72

to support, including themselves; they had averaged 12 years each at their work, averaging 10 hours per day and 11.3 months per year; all have steady employment; 13 own their homes, 7 of which were free from encumbrance; 8 rented their homes, paying an average of \$6.37 monthly rental; 8 hired their board, paying an average of \$2.44 each per week; 21 could save something from their earnings over and above the cost of their living, and 8 could not so save. They were paid as follows: One foreman, \$1.75 per day; 1 store clerk, \$1.50 per day; 4 engineers, \$1.52 each per day; 2 printers, \$2.00 each per day; 1 trimmer, \$2.00 per day; 3 carriage makers, \$1.75 each per day; 1 harness maker, \$1.25 per day; 2 tanners, \$1.75 each per day; 2 blacksmiths, \$2.50 each per day; 2 carpenters, \$2.13 each per day; 1 painter, \$2.50 per day; 2 millers, \$2.00 each per day; 1 machine hand, \$1.40 per day; 3 helpers, \$1.00 each per day; 1 laborer, \$1.25 per day; 2 apprentices, 63 cents each per day. Total 29, average \$1.65 each per day.

OWOSSO.

Number canvassed, 160; average age 34 years; 123 were native born, and 37 were foreign born; 111 were married, 45 were single and 4 widowed; the 115 married and widowed have 226 children; the 160 canvassed have 474 to support, including themselves; they had averaged 9 years at their work, averaging 10 hours per day and 11.7 months per year; all have steady employment; 69 own their homes, 44 of which were free from encumbrance; 42 rented their homes, paying an average of \$7.00 monthly rental; 49 hired their board, paying an average of \$2.89 each week; 60 could save something from their earnings over and above the cost of living, and 100 could not so save. They were paid as follows: Seven foremen, \$2.87 each per day; 2 shipping clerks, \$1.66 each per day; 1 machinist, \$1.50 per day; 17 cabinet makers, \$1.49 each per day; 17 trimmers, \$1.47 each per day; 23 finishers, \$1.33 each per day; 73 wood workers, \$1.54 each per day; 7 painters, \$1.55 each per day; 1 laborer, \$1.25 per day, and 12 apprentices at 82 cents each per day. Total 160, averaging \$1.50 each per day.

PORTLAND.

Number canvassed, 28; average age 29 years; all were native born; 13 were married and 15 were single; the 13 married have 15 children; the 28 canvassed have 55 to support, including themselves; they had averaged 5 years each at their work, averaging 10 hours per day, and 11.8 months per year; all had steady employment; 3 own their homes, all of which were free from encumbrance; 8 rented their homes, paying an average of \$4.50 monthly rental; 17 hired their board, paying an average of \$2.46 each per week; 7 could save something from their earnings over and above the cost of living, and 21 could not so save. They were paid as follows: One foreman, \$2.00 per day; 1 shipping clerk, \$1.25 per day; 1 cabinet maker, \$1.60 per day; 3 finishers, \$1.66 each per day; 3 painters, \$1.50 each per day; 8 wood workers, \$1.40 each per day; 3 laborers, \$1.07 each per day; 8 apprentices, 70 cents each per day. Total 28, average \$1.23 each per day.

SAGINAW.

Number canvassed, 28; average age 31 years; 19 were native born and 9 were foreign born; 15 were married and 13 were single; the 15 married have 31 children; the 28 canvassed have 71 to support, including themselves; they had averaged 7 years at their work, averaging 10 hours per day, and 11.6 months per year; all have steady employment; 4 own their homes, 3 of which were free from encumbrance; 11 rented their homes; paying an average of \$3.55 monthly rental; 13 hired their board, paying an average of \$2.70 each per week; 7 could save something from their earnings over and above the cost of living, and 21 could not so save. They were paid as follows: Three foremen, \$2.17 each per day; 1 engineer, \$1.85 per day; 1 fireman, \$1.25 per day; 1 machinist, \$2.00 per day; 2 blacksmiths, \$1.35 each per day; 3 painters, \$1.58 each per day; 6 wood workers, \$1.43 each per day; 8 laborers, \$1.17 each per day; 3 apprentices, 83 cents each per day. Total 28, average \$1.41 each per day.

SALEM.

Number canvassed, 13; average age 34 years; 8 were native born and 5 were foreign born; 8 were married and 5 were single; the 8 married have 16 children; the 13 canvassed have 33 to support, including themselves; they had averaged 12 years at their work, averaging 10.6 hours per day and 11.7 months per year; all have steady employment; 3 own their homes, all of which were free from encumbrance; 4 rented their homes, paying an average of \$4.50 monthly rental; 6 hired their board, paying an average of \$2.62 each per week; 11 could save something from their earnings over and above the cost of living, and 2 could not so save. They were paid as follows: Six store clerks, \$1.33 each per day; 1 cabinet maker, \$1.50 per day; 1 painter, \$2.00 per day; 4 harness makers, \$1.25 each per day; 1 laborer, \$1.25 per day. Total 13, average \$1.37 each per day.

SOUTH HAVEN.

Number canvassed, 33; average age 24 years; all were native born; 11 were married, 21 were single and 1 widowed; the 12 married and widowed have 12 children; the 33 canvassed have 54 to support, including themselves; they had averaged 5 years at their work, averaging 10 hours per day, and 10 months per year; all have steady employment; 5 owned their homes, 3 of which were free from encumbrance; 4 rented their homes, paying an average of \$5.00 monthly rental; 24 hired their board, paying an average of \$2.67 each per week; 12 could save something from their earnings over and above the cost of living, and 21 could not so save. They were paid as follows: One foreman, \$2.50 per day; 1 wood worker, \$1.25 per day; 28 basket makers, \$1.47 each per day; 1 laborer, \$1.25 per day; 2 apprentices, 68 cents each per day. Total 33, average \$1.45 each per day.

ST. JOSEPH.

Number canvassed, 199; average age 34 years; 112 were native born and 87 were foreign born; 131 were married, 62 were single, and 6 widowed; the 137 married and widowed have 323 children; the 199 canvassed have 663 to support, including themselves; they had averaged 10

years each at their work, averaging 10.4 hours per day, and 10.9 months per year; all have steady employment; 50 own their homes, 18 of which were free from encumbrance; 77 rented their homes, paying an average of \$7.85 monthly rental; 72 hired their board, paying an average of \$3.30 each per week; 125 could save something from their earnings over and above the cost of living and 74 could not so save. They were paid as follows: Five superintendents, \$3.93 each per day; 5 foremen, \$2.02 each per day; 5 book keepers, \$2.84 each per day; 4 shipping clerks, \$1.79 each per day; 18 store clerks, \$1.57 each per day; 35 machinists, \$2.11 each per day; 9 engineers, \$1.97 each per day; 2 firemen, \$1.29 each per day; 6 molders, \$2.63 each per day; 2 pattern makers, \$2.00 each per day; 28 carpenters, \$1.84 each per day; 1 boiler maker, \$2.00 per day; 5 book binders, \$2.00 each per day; 1 mason, \$2.50 per day; 1 plumber, \$2.50 per day; 1 trimmer, \$1.65 per day; 4 painters, \$1.73 each per day; 8 machine hands, \$1.81 each per day; 1 wagon maker, \$1.75 per day; 17 wood workers, \$1.68 each per day; 4 at rail wood work, \$1.97 each per day; 6 at factory work, \$1.67 each per day; 2 druggists, \$2.25 each per day; 6 helpers, \$1.42 each per day; 12 laborers, \$1.40 each per day; 11 apprentices, 74 cents each per day. Total 199, average \$1.88 each per day.

TECUMSEH.

Number canvassed, 39; average age 33 years; 35 were native born and 4 were foreign born; 9 were married; 23 were single and 7 widowed; the 16 married and widowed have 29 children; the 39 canvassed have 74 to support, including themselves; they had averaged 11 years at their work averaging 10.3 hours per day, and 12 months per year; all have steady employment; 1 owns his home which was free from encumbrance; 11 rented their homes, paying an average of \$5.95 monthly rental; 27 hired their board, paying an average of \$3.27 each per week; 36 could save something from their earnings over and above the cost of living, and 3 could not so save. They were paid as follows: Five store clerks, \$1.25 each per day; 2 machinists, \$2.50 each per day; 9 carpenters, \$2.00 each per day; 10 molders, \$2.02 each per day; 13 boiler makers, \$2.50 each per day. Total 39, average \$2.13 each per day.

WILLIAMSTON.

Number canvassed, 28; average age 32 years; 26 were native born and 2 were foreign born; 14 were married, 12 were single and 2 widowed; the 16 married and widowed had 27 children; the 28 canvassed had 68 to support, including themselves; they had averaged 10 years at their work, averaging 10 hours per day; and 11.1 months per year; all had steady employment; 13 owned their homes, 12 of which were free from encumbrance; 4 rented homes, paying an average of \$4.62 monthly rental; 11 hired their board, paying an average of \$2.60 each per week; 18 could save something from their earnings over and above the cost of living, and 10 could not so save. They were paid as follows: Two foremen, \$2.25 each per day; 5 store clerks, \$1.60 each per day; 1 engineer, \$2.00 per day; 1 tailor, \$1.75 per day; 1 carpenter, \$1.50 per day; 3 millers, \$1.75 each per day; 2 blacksmiths, \$2.13 each per day; 4 harness makers, \$1.50 each per day; 1 tinner, \$1.33 per day; 3 printers, \$1.58 each per day; 1 laborer, \$1.00 per day; 4 apprentices, \$1.00 each per day. Total 28, average \$1.59 each per day.

MISCELLANEOUS.

Number canvassed, 79; average age 30 years; 62 were native born and 17 were foreign born; 45 were married, 32 were single and 2 widowed; the 47 married and widowed have 93 children; the 79 canvassed have 197 to support, including themselves; they had averaged 6 years each at their work, averaging 9.9 hours per day; and 11.4 months each year; all have steady employment; 26 own their homes, 20 of which were free from encumbrance; 18 rented their homes, paying an average of \$6.47 monthly rental; 35 hired their board, paying an average of \$2.17 each per week; 43 could save something from their earnings over and above the cost of living, and 36 could not so save. They were paid as follows: One superintendent, \$3.33 per day; 2 foremen, \$3.00 per day; 2 shipping clerks, \$1.63 each per day; 1 store clerk, 85 cents per day; 2 machinists, \$2.00 each per day; 1 pattern maker, \$1.50 per day; 3 engineers, \$2.00 each per day; 1 plumber, \$2.00 per day; 2 printers, \$1.63 each per day; 9 tailors, \$2.17 each per day; 1 fireman, \$1.42 per day; 1 tinner, \$2.25 per day; 2 carpenters, \$1.33 each per day; 3 millers, \$1.58 each per day; 8 tanners, \$1.97 each per day; 1 wood worker, \$1.50 per day; 1 mason, \$3.00 per day; 4 machine hands, \$1.41 each per day; 1 cigar maker, \$2.25 per day; 1 teamster, \$1.50 per day; 8 laborers, \$1.06 each per day; 24 apprentices, 47 cents each per day. Total 79, average \$1.27 each per day.

CLASSIFICATION OF WORK, WAGES, ETC.

MANAGERS, 6; averaged 13 years at their work, averaging 9 hours per day and 12 months per year; average daily wages, \$6.50.

SUPERINTENDENTS, 58; averaged 12 years at their work, averaging 10 hours per day and 12 months per year; average daily wages, \$3.83.

FOREMEN, 160; averaged 10.3 years at their work, averaging 9.9 hours per day and 12 months per year; average daily wages, \$2.58.

INSPECTORS, 7; averaged 6.3 years at their work, averaging 10 hours per day and 12 months per year; average daily wages, \$1.71.

BOOKKEEPERS AND OFFICE CLERKS, 108; averaged 7.6 years at their work, averaging 9.8 hours per day and 11.9 months per year; average daily wages, \$2.11.

ARTISTS, 21; averaged 10.3 years at their work, averaging 9.9 hours per day and 11.6 months per year; average daily wages, \$2.49.

SHIPPING CLERKS, 51; averaged 6.5 years at their work, averaging 10 hours per day and 11.8 months per year; average daily wages, \$1.69.

STORE CLERKS AND SALESMEN, 238; averaged 9.9 years at their work, averaging 11.8 hours per day and 11.7 months per year; average daily wages, \$1.73.

MACHINISTS, 270; averaged 13.3 years at their work, averaging 9.9 hours per day and 11.4 months per year; average daily wages, \$2.12.

ENGINEERS, 118; averaged 14.6 years at their work, averaging 10.2 hours per day and 11.5 months per year; average daily wages, \$1.85.

FIREMEN, 16; averaged 5.5 years at their work, averaging 10.4 hours per day and 11.8 months per year; average daily wages, \$1.42.

CARPENTERS, 155; averaged 18 years at their work, averaging 10 hours per day and 10.1 months per year; average daily wages, \$1.85.

PAINTERS, 138; averaged 19 years at their work, averaging 9.9 hours per day and 10.9 months per year; average daily wages, \$1.38.

PRINTERS AND BOOKBINDERS, 273; averaged 14 years at their work, averaging 9 hours per day and 11.4 months per year; average daily wages \$1.83.

FINISHERS, 57; averaged 8.4 years at their work, averaging 10 hours per day and 11.5 months per year; average daily wages, \$1.47.

BLACKSMITHS, 106; averaged 18.4 years at their work, averaging 9.9 hours per day and 11.6 months per year; average daily wages, \$2.01.

MASONS, 34; averaged 16 years at their work, averaging 10 hours per day and 7.1 months per year; average daily wages, \$2.81.

TAILORS AND CUTTERS, 66; averaged 8.4 years at their work, averaging 9.9 hours per day and 10.9 months per year; average daily wages, \$2.02.

TINNERS, 31; averaged 15.2 years at their work, averaging 9.9 hours per day and 11.2 months per year; average daily wages, \$1.84.

MACHINE HANDS, 180; averaged 8.8 years at their work, averaging 9.9 hours per day and 11.4 months per year; average daily wages, \$1.48.

WOOD WORKERS, 251; averaged 10 years at their work, averaging 9.9 hours per day and 11.1 months per year; average daily wages, \$1.56.

CABINET WORK, 79; averaged 12.5 years at their work, averaging 10 hours per day and 11.5 months per year; average daily wages, \$1.71.

CARRIAGE AND WAGON WORK, 56; averaged 12 years at their work, averaging 10 hours per day and 11.8 months per year; average daily wages, \$1.82.

MOLDERS, 140; averaged 11.1 years at their work, averaging 9.9 hours per day and 10.5 months per year; average daily wages, \$2.02.

CIGAR MAKERS, 94; averaged 13 years at their work, averaging 8 hours per day and 10.5 months per year; average daily wages, \$1.96.

MILLERS, 27; averaged 16 years at their work, averaging 10.2 hours per day and 11.8 months per year; average daily wages, \$1.72.

FACTORY WORK, 249; averaged 5 years at their work, averaging 9.4 hours per day and 11.3 months per year; average daily wages, \$1.51.

IN WOOLEN MILLS, 120; averaged 6.3 years at their work, averaging 10.1 hours per day and 11.9 months per year; average daily wages, \$1.13.

PATTERN MAKERS, 21; averaged 12.3 years at their work, averaging 9.9 hours per day and 11.5 months per year; average daily wages, \$2.10.

CORE MAKERS, 17; averaged 4.6 years at their work, averaging 10 hours per day and 11.3 months per year; average daily wages, \$1.49.

BOILER MAKERS, 24; averaged 11.7 years at their work, averaging 10 hours per day and 11.7 months per year; average daily wages, \$2.31.

PLUMBERS, ETC., 26; averaged 7 years at their work, averaging 10 hours per day and 11.1 months per year; average daily wages, \$1.95.

TRIMMERS, 41; averaged 8.1 years at their work, averaging 11 hours per day and 11.1 months per year; average daily wages, \$1.64.

POLISHERS, GLAZIERS, ETC., 27; averaged 8 years at their work, averaging 10 hours per day and 11.4 months per year; average daily wages, \$1.95.

HARNESS MAKERS, 26; averaged 17 years at their work, averaging 10 hours per day and 11.7 months per year; average daily wages, \$1.56.

COOPERS, 26; averaged 22.7 years at their work, averaging 10 hours per day and 9.8 months per year; average daily wages, \$1.42.

HEALTH FOOD, 40; averaged 2.3 years at their work, averaging 10.4 hours per day and 9.1 months per year; average daily wages, \$1.55.

MACHINE WOOD WORKERS, 93; averaged 9.6 years at their work, averaging 10 hours per day and 11.5 months per year; average daily wages, \$1.44.

BUTCHERS AND PACKERS, 36; averaged 10 years at their work, averaging 11.1 hours per day and 11.2 months per year; average daily wages, \$1.55.

LAUNDRY WORK, 20; averaged 7.8 years at their work, averaging 10 hours per day and 12 months per year; average daily wages, \$1.97.

RAILROAD WORK, 39; averaged 8.3 years at their work, averaging 11 hours per day and 11.8 months per year; average daily wages, \$1.57.

BARBERS, 19; averaged 11.1 years at their work, averaging 13 hours per day and 12 months per year; average daily wages, \$1.56.

TEAMSTERS, 17; averaged 5.7 years at their work, averaging 10.2 hours per day and 11.8 months per year; average daily wages, \$1.45.

IN SHOE FACTORY, 42; averaged 3.8 years at their work, averaging 10 hours per day and 12 months per year; average daily wages, \$1.64.

LABORERS, 474; averaged 4.5 years at their work, averaging 9.9 hours per day and 10.8 months per year; average daily wages, \$1.27.

HELPERS, 58; averaged 4.5 years at their work, averaging 10 hours per day and 11.8 months per year; average daily wages, \$1.35.

APPRENTICES, 600; averaged 1 year at their work, averaging 10 hours per day and 11.4 months per year; average daily wages, 81 cents.

MISCELLANEOUS, 45; averaged 8 years at their work, averaging 10.7 hours per day and 11.7 months per year; average daily wages, \$1.75.

RECAPITULATION.

Whole number males canvassed.....	4,800
Number towns canvassed.....	34
Number of employments canvassed.....	58
Average number canvassed for each town.....	141
Average number canvassed for each employment.....	83
Average age of those canvassed.....	31.8 years.
Number that were native born.....	3,897
Number that were foreign born.....	903
Number that were married.....	2,756
Number that were single.....	1,932
Number that were widowed.....	112
Number children reported by married and widowed.....	5,293
Whole number to support by entire canvass.....	12,474
Average number children each for married and widowed.....	1.8
Average number to support for each person canvassed.....	2.5
Average number years worked at employment.....	9.6
Average number months worked per year.....	11.3
Average number hours worked per day.....	10.4
Average daily wages for each employe.....	\$1 67

Number who own homes.....	1,241
Number renting homes.....	1,549
Number who hire their board.....	2,010
Number homes free from encumbrance.....	686
Average monthly rental	\$7 02
Average weekly board	2 89
Number who can save something over and above cost of living.....	2,905
Number who cannot so save.....	1,895

DEDUCTIONS.

NATIVITY AND SOCIAL CONDITIONS.

There were 4,800 males canvassed, whose ages averaged 31.8 years. Eighty-one per cent were native born and nineteen per cent were of foreign birth.

MARRIAGE AND HOME RELATIONS.

Nearly 58 per cent of those canvassed were married, 40 per cent were single and 2 per cent were widowers. At the time these statistics were gathered the entire 4,800 had employment. There were 5,293 children reported by the 2,868 married and widowed, which gives an average of 1.8 children for each family.

NUMBER DEPENDENT.

The 4,800 wage workers canvassed report that they have 12,474 to support, including the person canvassed, an average of 2.6 for each.

AS TO HOMES.

There are 1,241, or 26 per cent of the total, who own their homes, 55 per cent of which were free from encumbrance, while 45 per cent were more or less encumbered by mortgages and other liabilities.

There are 1,549, or 32 per cent, who rent their homes, paying an average monthly rental of \$7.02, and there are 2,010, or 42 per cent, who hire their board, paying an average of \$2.89 each per week.

ABILITY TO SAVE.

Of those canvassed 60 per cent report they are able to save something from their earnings, while 40 per cent report they cannot so save.

In classifying the work of those canvassed they were found to be engaged in 58 different employments, but owing to a similarity of several occupations, and for the convenience of the clerical department of the Bureau, several have been classified under the head of miscellaneous.

CANVASS OF FEMALE WAGE EARNERS.

During the year a canvass was made of 1,503 female wage earners, embracing 37 different employments. The canvass was made in 22 different cities and villages; the inquiries being as to ages, whether native or foreign born, if foreign born, number of years in the United States, number that were married, single and widowed, number of children, whole number to support, length of time worked at the employment, number of hours worked per day, number of months worked per year. Average wages paid each employment, number having employment at time of canvass. Number owning homes, number homes free from encumbrance, number renting homes. Average price of rent per month. Number boarding, average prices paid for board per week. Number who can save from their earnings over and above the cost of living, and number who cannot so save. The following is a report from the towns canvassed:

ADRIAN.

Number canvassed, 30; average age 26 years; all were native born; 27 were single, two were married, and one was widowed; the two married have four children; the 30 have 33 to support, including themselves; they had averaged 3 $\frac{1}{2}$ years at their work, and had averaged 12 months each year; all had steady employment, and averaged \$1.17 each per day; one owned a home, which was not free from encumbrance; one rented a home, paying \$8.00 per month; 28 boarded, paying an average of \$2.41 per week for board; 26 were able to save from their earnings. They were paid as follows: One forelady \$1.00 per day; 18 stenographers average \$1.14 each per day; 7 bookkeepers and office clerks average \$1.13 each per day; 4 at factory work average 88 cents each per day.

ALBION.

Number canvassed, 15; average age 19 years; 14 were native born and 1 foreign born; the one foreign born has lived in the United States 16 years; 12 were single, and 3 married; the 3 married have 4 children; the 15 have 22 to support, including themselves; they had averaged 3 $\frac{1}{2}$ years each at their work, and averaged 12 months each year; all have steady employment, and averaged 90 cents each per day; one owned a home which was free from encumbrance; two rented homes, paying \$7.25 each per month for rent, and 12 boarded, paying an average of \$2.02 per week for board; 11 could save from their earnings and 4 could not. They were paid as follows: One stenographer, \$1.25 per day; two bookkeepers, 92 cents each per day; one machine operator, \$1.25 per day; 8 at

laundry work, 86 cents each per day; 3 compositors, 83 cents each per day.

BENTON HARBOR.

Number canvassed, 86; average age $23\frac{1}{2}$ years; 82 were native born, and 4 foreign born; the foreign born had lived in the United States an average of 15 years each; 73 were single, 9 were married and 4 widowed; the 13 married and widowed have 11 children; the 86 have 105 to support, including themselves; they had averaged $3\frac{1}{2}$ years at their work, and had averaged 11 months each year; all have steady employment, and had averaged \$1.01 each per day; 4 owned their homes, none of which were free from encumbrance; 8 rented their homes, paying \$6.20 each per month for rent, and 74 boarded, paying an average of \$2.64 each per week for board; 61 could save from their earnings, and 25 could not. They were paid as follows: One manager, \$2.00 per day; 2 foreladies, \$1.13 each per day; 17 bookkeepers, \$1.30 each per day; 11 stenographers, 81 cents each per day; 9 salesladies, 95 cents each per day; 8 store clerks, 83 cents each per day; 2 milliners, 75 cents each per day; 5 telephone operators, 62 cents each per day; 5 boxmakers, \$1.25 each per day; 9 laundry work, 86 cents each per day; 5 in cigar factory, 91 cents each per day, 7 compositors, 91 cents each per day; 2 retouchers, \$1.00 each per day; 3 at tailor work, 87 cents each per day.

CLINTON.

Number canvassed, 55; average age 27 years; all were native born; 36 were single, 13 were married and 6 widowed; the 19 married and widowed have 33 children; the 55 have 67 to support, including themselves; they had averaged 5 years each at their work, and had averaged 12 months each year; all have steady employment, and had averaged 79 cents each per day; 4 owned their homes, two of which were free from encumbrance; two rented their homes, paying \$4.00 each per month for rent; 49 boarded, paying an average of \$1.65 each per week for board; 28 could save from their earnings and 27 could not. They were paid as follows: One, \$1.25 per day; 9, \$1.00 each per day; 17, 80 cents each per day; 28, 70 cents each per day. All were employed in woolen mills.

COLDWATER.

Number canvassed, 58; average age 22 years; 54 were native born and 4 foreign born; the foreign-born had lived in the United States an average of 30 years each; 50 were single, 5 were married and 3 widowed; the 8 married and widowed had 11 children; the 58 have 68 to support, including themselves; they had averaged $1\frac{3}{4}$ years each at their work, and had averaged 12 months each year; all have steady employment, and had averaged 72 cents each per day; three owned their homes, two of which were free from encumbrance; 4 rented their homes, paying an average of \$6.62 each per month; 51 boarded, paying an average of \$1.87 each per week for board; 34 could save from their earnings, and 24 could not. They were paid as follows: Two foreladies, \$1.49 each per day; 1 stenographer, \$1.25 per day; 1 bookkeeper, \$1.66 per day; 1 office clerk, \$1.00 per day; 48 in shoe factory, 75 cents each per day; 5 apprentices, 33 cents each per day.

COLUMBIAVILLE.

Number canvassed, 49; average age $20\frac{1}{2}$ years; 38 were native born and 11 were foreign born; 42 were single, 6 were married, and 1 widowed; the seven married and widowed have five children; the 49 have 58 to support, including themselves; they have averaged $2\frac{1}{2}$ years each at their work, and had averaged 12 months per year; all have steady employment, and had averaged 72 cents each per day; 2 own their homes, 1 of which was free from encumbrance; 2 rent their homes, paying an average of \$5.25 each per month for rent, and 45 board, paying an average of \$2.01 each per week for board; 3 can save from their earnings and 46 cannot. They were paid as follows: Two, \$1.25 each per day; 4, \$1.00 each per day; 1, 80 cents per day; 18, 75 cents each per day; 3, 70 cents each per day; 21, 60 cents each per day. All were employed in woolen mills.

FLINT.

Number canvassed, 32; average age 26 years; 28 were native born and 4 were foreign born; 27 were single; 3 were married and 2 widowed; the 5 married and widowed had one child; the 32 had 37 to support, including themselves; they had averaged 6 years each at their work, and had averaged $11\frac{1}{2}$ months each year; all have steady employment, and had averaged 79 cents each per day; 2 own their homes, both of which were free from encumbrance; 3 rented their homes, paying an average of \$5.50 each per month for rent, and 27 boarded, paying \$2.16 each per week for board; 8 could save from their earnings and 24 could not. They were paid as follows: Twelve, \$1.00 each per day; 3, 83 cents each per day; 3, 75 cents each per day; 7, 66 cents each per day; 2, 60 cents each per day; 5, 50 cents each per day. All were employed in woolen mills.

GRAND HAVEN.

Number canvassed, 8; average age 17 years; 6 were native born and 2 were foreign born; all were single having just themselves to support; they had averaged one year each at their work, working $9\frac{1}{2}$ months; all have steady employment and had averaged 51 cents each per day; all were boarding, averaging \$1.50 each per week for board; none could save anything from their earnings. One was paid 60 cents per day; the others 50 cents each per day. All were employed in a basket factory.

HILLSDALE.

Number canvassed, 36; average age 30 years; 34 were native born and two were foreign born; the latter of which had lived in the United States nearly their entire lives; 31 were single and 5 widowed; the 5 had 14 children; the 36 had 44 to support, including themselves; they had averaged 3 years each at their work and had averaged $10\frac{1}{3}$ months each per year; all have steady employment and had averaged 92 cents each per day; 6 own their homes 5 of which are free from encumbrance; 3 rent their homes averaging \$6.00 each per month for rent; 27 board, paying an average of \$2.00 each per week for board; 21 can save from

their earnings and 15 cannot. They were paid as follows: One forelady, \$1.25 per day; 4 compositors, 65 cents each per day; 1 seamstress, \$1.00 per day; 4 tailoring, \$1.00 each per day; 8 machine operators, 85 cents each per day; 18 in fur coat factory, 99 cents each per day.

HOWELL.

Number canvassed, 75; average age 25 years; 67 were native born and 8 were foreign born; those foreign born had averaged 17 years each in United States; 57 were single 13 were married and 5 were widowed; the 18 married and widowed had 23 children; 75 had 98 to support, including themselves; they had averaged 3 years each at their work and had averaged 11½ months each year; all had employment and had averaged 75 cents each per day; 11 owned their homes 6 of which were free from encumbrance; 3 rented their homes, paying an average of \$6.13 each per month; 61 board, paying an average of \$1.90 each per week for board; 25 can save from their earnings and 50 cannot. They were paid as follows: One compositor, \$1.00 per day; 10 tailoring, \$1.06 each per day; 1 stenographer, \$1.00 per day; 43 in condensed milk works, 78 cents each per day; 13 factory work, 50 cents each per day; 3 bean picking, 45 cents each per day; 4 apprentices, 64 cents each per day.

JACKSON.

Number canvassed, 265; average age 23½ years; 223 were native born and 42 were foreign born; the foreign born had lived in the United States an average of 17 years each; 212 were single, 22 were married and 31 widowed; the 51 married and widowed had 63 children; the 265 have 339 to support, including themselves; they had averaged 3¾ years each at their work and had averaged 12 months each year; all have steady employment and had averaged 93 cents each per day; 14 own their homes, of which 9 were free from encumbrance; 27 rent their homes, paying an average of \$6.55 each per month rent; 224 boarded, paying an average of \$2.32 each per week for board; 117 can save from their earnings and 148 cannot. They were paid as follows: Ten foreladies, \$1.40 each per day; 4 stenographers, \$2.71 each per day; 2 bookkeepers, \$1.25 each per day; 2 office clerks, \$1.00 each per day; 3 stock keepers, 42 cents each per day; 76 in corset factory, 90 cents each per day; 109 in shirt factory, 87 cents each per day; 59 at factory work, 99 cents each per day.

KALAMAZOO.

Number canvassed, 440; average age 23½ years; 367 were native born and 73 foreign born; those foreign born had been in the United States an average of 16 years each; 363 were single; 38 were married and 39 widowed; the 77 married and widowed had 108 children; the 440 canvassed had 556 to support, including themselves; they had averaged 2¾ years each at their work and had averaged 12 months each year; all had steady employment and had averaged 86 cents each per day; 17 own their homes, 8 of which were free from encumbrance; 31 rent their homes, paying an average of \$6.32 each per month for rent; 392 board, paying

an average of \$2.18 each per week for board; 162 can save from their earnings and 278 cannot. They were paid as follows: Four foreladies, \$1.62 each per day; 7 bookkeepers and office clerks, \$1.15 each per day; 19 stenographers, \$1.16 each per day; 2 machine operators, \$1.25 each per day; 20 in book bindery, 68 cents each per day; 62 in pants factory, 91 cents each per day; 49 in paper mill, 88 cents each per day; 169 at factory work, 80 cents each per day; 105 in corset factory, 91 cents each per day; 3 seamstresses, \$1.17 each per day.

LANSING.

Number canvassed, 200; average age 25 years; 177 were native born and 23 were foreign born; the foreign born had lived in the United States an average of 16 years each; 164 were single, 28 were married and 8 widowed; the 36 married and widowed had 56 children; the 200 canvassed had 233 to support, including themselves; they had averaged $3\frac{1}{3}$ years at their work and had worked 11 months each year; all had steady employment and had averaged 85 cents each per day; 16 own their homes, 13 of which were free from encumbrance; 15 rent their homes, paying an average of \$5.23 each per month rent; 169 board, paying an average of \$2.02 each per week for board; 86 can save from their earnings and 114 cannot. They were paid as follows: Four foreladies, \$1.04 each per day; 4 stenographers, \$1.45 each per day; 5 bookkeepers, \$1.93 each per day; 3 office clerks, \$1.08 each per day; 1 dressmaker, 83 cents per day; 4 shirt makers, 75 cents each per day; 11 at tailoring, 95 cents each per day; 26 in book bindery, 81 cents each per day; 19 machine operators, 67 cents each per day; 25 in condensed milk works, 88 cents each per day; 5 laboratory work, 60 cents each per day; 34 in knitting factory, 82 cents each per day; 6 candy makers, 63 cents each per day; 17 at laundry work, \$1.08 each per day; 12 in cigar factory, 66 cents each per day; 24 bean pickers, 57 cents each per day.

MASON.

Number canvassed, 15; average age 32 years; all were native born; 6 were single, five were married and 4 widowed; the 9 married and widowed had 10 children; the 15 have 27 to support, including themselves; they had averaged $3\frac{1}{2}$ years each at their work, and had averaged 9 months each year; all have steady employment and had averaged 55 cents each per day; 7 own their homes, 4 of which are free from encumbrance; 2 rent their homes, paying an average of \$5.00 each per month for rent; 6 board at home, paying an average of \$1.00 each per week for their board; 9 can save from their earnings and 6 cannot. They were employed as bean pickers, 4 earning 75 cents each per day; 1, 70 cents per day; 1, 60 cents per day; 6, 50 cents each per day, and 4, 40 cents each per day.

ST. JOSEPH.

Number canvassed, 79; average age 21 years; 50 were native born and 19 were foreign born; the 19 foreign born had lived in the United States an average of 10 years each; 77 were single and 2 were married; the 79

had 84 to support, including themselves; they had averaged 3 years each at their work and had averaged $11\frac{1}{2}$ months each year; all had employment and had averaged 99 cents each per day; 1 owns a home which is free from encumbrance; 3 rent homes, paying an average of \$3.70 each per month for rent; 76 board, paying an average of \$2.36 each per week for board; 72 can save from their earnings and 7 cannot. They were paid as follows: Two foreladies, \$1.28 each per day; 2 stenographers, \$1.29 each per day; 3 office clerks, 94 cents each per day; 2 compositors, \$1.00 each per day; 4 hotel work, 88 cents each per day; 66 in knitting factory, 98 cents per day.

WILLIAMSTON.

Number canvassed, 27; average age 25 years; 26 were native born and 1 foreign born who had lived in the United States 15 years; 17 were single, 8 were married and 2 were widowed; the 10 married and widowed had 12 children; the 27 had 46 to support, including themselves; they had each averaged $1\frac{3}{4}$ years at their work and had averaged 8 months each year; all had employment and had averaged 56 cents each per day; 9 own their homes, 7 of which were free from encumbrance; 1 rents a home, paying \$3.00 per month rent; 17 board, paying an average of \$2.32 each per week for board; 14 can save from their earnings and 13 cannot. They are paid as follows: Two bookkeepers, average 63 cents each per day; 3 store clerks, average 55 cents each per day; 1 compositor, averages \$1.50 per day; 2 at laundry work, average 68 cents each per day; 19 bean pickers, average 50 cents each per day.

MISCELLANEOUS.

Number canvassed, 33; average age 22 years; 30 were native born and 3 were foreign born; 30 were single and 3 were married; these 33 had 34 to support, including themselves; they had averaged 4 years at their work and had averaged 10 months each year; all had steady employment and had averaged \$1.05 each per day; 1 rents a home, paying \$5.00 per month rent; 32 boarded, paying an average of \$2.37 each per week for board; 13 were able to save from their earnings and 20 were not. They were paid as follows: Nine milliners, \$1.18 each per day; 1 dressmaker, 75 cents per day; 7 at basket work, \$1.83 each per day; 5 in woolen mill, 55 cents each per day; 11 casket trimmers, 70 cents each per day.

CLASSIFICATION OF FEMALE LABOR.

The female wage earners were classified into 37 different employments, several being placed under the head of "miscellaneous." The following shows the classification, together with time worked and average daily earnings for each employment:

FORELADIES, 26; averaged 6.9 years at their work, 11.5 months each year, 10 hours per day; average daily wages, \$1.35.

STENOGRAPHERS, 61; averaged 3.9 years at their work, 11.8 months each year, 9 hours per day; average daily wages, \$1.23.

BOOKKEEPERS, 35; averaged 4.3 years at their work, 11.1 month each year, 9.4 hours per day; average daily wages, \$1.36.

OFFICE CLERKS, 17; averaged 3.7 years at their work, 11.2 months each year, 9.4 hours per day; average daily wages, \$1.09.

MACHINE OPERATORS, 30; averaged 3.4 years at their work, 10.7 months each year, 9.9 hours per day; average daily wages, 77 cents.

BOOK BINDING, 46; averaged 2.3 years at their work, 12 months each year, 9.9 hours per day; average daily wages, 77 cents.

PANTS FACTORY, 62; averaged 3.7 years at their work, 12 months each year, 10 hours per day, average daily wages, 81 cents.

CORSET FACTORY, 181; averaged 2.8 years at their work, 12 months each year, 10 hours per day; average daily wages, 90 cents.

PAPER MILL, 49; averaged 2.7 years at their work, 12 months each year, 10 hours per day; average daily wages, 87 cents.

FACTORY WORK, 245; averaged 2.3 years at their work, 12 months each year, 10 hours per day; average daily wages, 83 cents.

SHOE FACTORY, 48; averaged 1.8 years at their work, 12 months each year, 10 hours per day; average daily wages, 57 cents.

WOOLEN MILLS, 141; averaged 4.3 years at their work, 11.8 months each year, 10 hours per day; average daily wages, 75 cents.

STORE CLERKS, 25; averaged 2.7 years at their work, 11.6 months each year, 10.5 hours per day; average daily wages, 85 cents.

COMPOSITORS, 18; averaged 4.9 years at their work, 11.7 months each year, 9.7 hours per day; average daily wages, 88 cents.

LAUNDRY WORK, 36; averaged 5.2 years at their work, 11.6 months each year, 9.9 hours per day; average daily wages, 93 cents.

BEAN PICKERS, 61; averaged 1.6 years at their work, 8.7 months each year, 10 hours per day; average daily wages, 54 cents.

BASKET WORK, 15; averaged 3.6 years at their work, 9.2 months each year, 10 hours per day; average daily wages, \$1.12.

TAILORING, 28; averaged 6.2 years at their work, 9 months each year, 9.8 hours per day; average daily wages, 95 cents.

CONDENSED MILK WORKS, 68; averaged 2.8 years at their work, 11.6 months each year, 9.9 hours per day; average daily wages, 80 cents.

MILLINERS AND DRESSMAKERS, 17; averaged 4 years at their work, 10 months each year, 10 hours per day; average daily wages, \$1.07.

SHIRT FACTORY, 113; averaged 2.6 years at their work, 12 months each year, 10 hours per day; average daily wages, 96 cents.

KNITTING FACTORY, 100; averaged 2.7 years at their work, 11.3 months each year, 10 hours per day; average daily wages, 95 cents.

CIGAR FACTORY, 117; averaged 2.1 years at their work, 10.3 months each year, 8.7 hours per day; average daily wages, 71 cents.

TELEPHONE OPERATORS, 5; averaged 2 years at their work, 12 months each year, 11 hours per day; average daily wages, 61 cents.

FUR COAT FACTORY, 18; averaged 3 years at their work, 10 months each year, 9 hours per day; average daily wages, 99 cents.

CASKET TRIMMERS, 11; averaged 3 years at their work, 12 months each year, 10 hours per day; average daily wages, 70 cents.

APPRENTICES, 9; averaged 6 years at their work, 12 months each year, 10 hours per day; average daily wages, 47 cents.

MISCELLANEOUS, 20; averaged 3.2 years at their work, 10.5 months each year, 10 hours per day; average daily wages, 82 cents.

RECAPITULATION.

Whole number females canvassed.....	1,503
Number towns canvassed.....	22
Number of employments canvassed.....	37
Average number canvassed for each town.....	68
Average number canvassed for each employment.....	41
Average age of those canvassed, 23.9 years.	
Number that were native born.....	1,296
Number that were foreign born.....	207
Average number years foreign born in U. S.....	15.5
Number that were married.....	160
Number that were single.....	1,232
Number that were widowed.....	111
Number children reported by married and widowed.....	355
Whole number to support by entire canvass.....	1,879
Average number children each for married and widowed.....	1.3
Average number to support for each person canvassed.....	1.2
Average number years worked at employment.....	3.2
Average number months worked per year.....	11.5
Average number hours worked per day.....	10.2
Average daily wages for each employe.....	\$0 87
Number who own homes.....	98
Number renting homes.....	108
Number who hire their board.....	1,297
Number homes free from encumbrance.....	61
Average monthly rental.....	\$5 98
Average weekly board.....	2 06
Number who can save something over and above cost of living.....	690
Number who cannot so save.....	813

DEDUCTIONS.

Deductions from the above show that the average age of those canvassed was 23.9 years, and that 86 per cent were native born, 14 per cent being of foreign birth.

MARRIAGE AND HOME RELATIONS.

Nearly 11 per cent of those canvassed were married, 82 per cent were single and 7 per cent were widows. At the time these statistics were gathered the whole 1,503 had employment. There were 355 children reported by the 271 married and widowed, which gives an average of 1.3 children for each having children.

NUMBER DEPENDENT.

The 1,503 wage workers canvassed report that they have 1,879 persons to support, which is an average of 1.2 for each person canvassed.

AS TO HOMES.

There are 98, or 7 per cent of the total, who own their homes; 62 per cent of which were free from encumbrance, while 38 per cent were more or less encumbered by mortgages and liabilities.

There are 108, or 7 per cent, who rent their homes, and 1,297, or 86 per cent, who hire their board, the average monthly rental for houses being \$5.98. Those hiring their board paid an average of \$2.06 each per week.

ABILITY TO SAVE.

Of those canvassed, 46 per cent report they can save something from their earnings over and above the cost of living, while 54 per cent report they are not able to so save.

AN INTERESTING CHAPTER

1900

Suicides and Attempted Suicides

PERSONAL DATA

BOILER EXPLOSIONS

Labor Strikes and Disturbances

INDUSTRIAL STATISTICS

Gleaned Largely From the Newspapers

SUICIDES IN 1900.

The newspaper clippings saved between January 1, 1900, to January 1, 1901, show that 166 persons in Michigan committed suicide during the above stated time, of which 118 were males and 48 were females. Of the suicides reported in Michigan in 1900, the City of Detroit furnished 33, or 20 per cent.

MANNER OF SUICIDES.

Shooting	51
Poison	43
Hanging	35
Drowning	14
Jumping in front of moving train.....	8
Cutting throat	5
Cutting himself and letting out intestines.....	1
Cutting artery	2
Turning on gas.....	2
Jumping from window.....	1
Leaped from windmill.....	1
Unknown manner	3
Total	166

Of the 43 who suicided by taking poison, 15 took carbolic acid; 6 strychnine; 5 paris green; 4 morphine; 2 arsenic; 2 laudanum; 2 rough on rats, 1 aconite; 1 wood alcohol; 1 cyanide of potassium; 4 unknown.

CAUSES ASSIGNED.

Despondency	46
Unbalanced	22
Ill health	19
Domestic troubles	11
Love affairs	9
Financial difficulties	5
Dissipation	5
Intemperance	4
Temporary insanity	3
Grief	4
Homesickness	1
Insomnia	1
Anger	1
Unknown	35
Total	166

INDIVIDUAL DATA OF SUICIDES.

January 4—Charles Root, Mattawan, 40 years old, married; cut his throat. Domestic troubles.

January 5—Carl Schokowski, Detroit, 48 years old, married; cut his throat and severed arteries of wrist. Intemperance.

January 8—Sherman Church, Kalamazoo, 30 years old, married; drowned in mill pond. Mystery.

January 8—Charles Brown, Lawton, 40 years old; hung himself. Mystery.

January 8—August Bolanga, Marine City, married; shot himself below the heart. It is thought he was deranged at the time he committed suicide.

January 8—T. A. Demott, Milan, 30 years old, unmarried; hung himself. He was an inmate at the county poor house.

January 12—Mrs. Cornelia Hofma, Grand Rapids, married; took arsenic. Deceased showed signs of an unbalanced mind.

January 12—John April, Eaton Rapids, 55 years old, married; shot a 38-caliber revolver into his mouth. Cause unknown.

January 15—A. K. Wheeler, Grand Rapids, 40 years old, married; shot himself through the head. Despondency.

January 15—Peter Berg, Sr., Holland, 67 years old, married, hung himself. No cause given.

January 15—Hiram King, Pulaski, 70 years old, married; shot himself in the abdomen. Had been ill a long time and became despondent.

January 19—Mrs. Dora Shaft, Shaftsburg, married; blew top of her head off with a rifle. Had attempted it before, but cause unknown.

January 16—John Nystrom, Lansing; took carbolic acid. Cause not known.

January 18—Adam Goetz, Adrian, 39 years, married; shot himself with a rifle. Despondency.

January 18—Joseph Karntz, Detroit, 42 years, unmarried; hung himself. Suffered severely from rheumatism.

January 20—Mrs. Wyckoff, Howell, 64 years old, widow; hung herself. Ill health.

January 21—George Banker, Hillsdale, 70 years old, married; took carbolic acid. Sickness and despondency.

January 23—John Wykoff, St. Johns, 68 years old, married; hung himself to an apple tree. Despondency.

January 29—Lena Marsh, Marinette, 23 years old, unmarried; (means employed not given.) Faithless lover.

February 6—John Klaar, Detroit, 58 years old, married; took arsenic. Hard drinker.

February 14—George W. Scribner, Ionia, 74 years old, married; hung himself. Despondency.

February 15—Harry Dickey, Marshall, unmarried; took strychnine. Cause unknown.

February 16—Mrs. J. F. Jackson, Benzonia, married; took rough on rats. Ill health thought to be the cause.

February 20—James Dyer, Detroit, 69 years old, married; blew top of his head off with rifle. Cause thought to be due to long illness.

February 21—Alan Geisler, Benton Harbor; drowned himself. Family quarrel.

February 22—Ex-State Senator Joseph Flesheim, Menominee, 52 years old, married; shot himself through the temple. Business failure.

March 2—Jacob Bontekoe, Holland, 18 years old, unmarried; threw himself in front of a moving train. Temporary insanity caused from illness.

March 6—Mrs. Dora Eberts, Detroit, 29 years old, married; took morphine. Tired of life.

March 6—Henry James, West Branch, 55 years old, married; cut gashes letting out his intestines. Melancholy.

March 9—Mrs. John J. Flanigan, Jackson, married; shot herself. Family trouble.

March 14—Clara McQuinn, Bay City, 16 years old, unmarried; took carbolic acid. Despondency.

March 17—L. B. Kellogg, Detroit, 72 years old, married; shot himself through the head. Despondency.

March 17—George Spencer, Detroit, 35 years old; shot himself. Despondency.

March 20—Felix Karppa, Houghton; hung himself with piece of wire. Became despondent over profane surroundings.

March 21—Chas. Scott, Owosso, 35 years old, married; shot himself. Domestic trouble.

March 23—John L. Snooks, Coldwater, married; took laudanum. Domestic troubles.

March 24—Cora Kettler, Evart, 21 years old, unmarried; took strychnine. Mystery, but supposed to be a love affair.

March 29—Louis Boelsen, Adrian, 40 years old, unmarried; blew top of his head off with shot gun. Temporary insanity.

March 30—Joseph L. Langevin, Bay City, 50 years old, married; took carbolic acid. Mystery.

March 30—Charles Joy, Fowlerville; hanged himself. Homesick.

April 5—Mrs. Ormsby, Romeo. Charged with sending objectionable letters to the United States grand jury and became frightened and took her life.

April 8—Leonard Gruner, Ann Arbor, married; shot himself. Worried over business matters.

April 10—Oscar Warden, Ludington, married; cut his throat with razor. Despondency and jealousy.

April 10—George Fielding, Grand Rapids, 20 years old, unmarried; took carbolic acid. Mystery.

April 11—Laura Stevens, Grand Rapids, 44 years old, unmarried; took carbolic acid. Unbalanced mind over business affairs.

April 11—Konrad Mueller, Grand Rapids, 56 years old, married; took strychnine. Had been in poor health and became despondent.

April 17—L. Kellogg, Detroit, old man, widower; shot himself. Had no one to live for and became despondent.

April 19—Fred Harvell, Marcellus, young, unmarried; shot himself through the heart. Love affair.

April 20—Harlow W. Carter, Hastings, 19 years old, unmarried; took poison (kind of poison not given). Ill health.

April 23—L. H. Beck, Detroit, 64 years old, widower; severed arteries of his right arm with a paring knife. Melancholy.

April 23—C. H. Chalfant, Detroit, 45 years old, married; took car-bolic acid. May have been brought on from previous injury on his head.

April 23—Alfred Casgrain, Detroit, 32 years old, unmarried; thought to have drowned himself. No cause known.

April 24—Oscar Curtis, Watervliet, 18 years old, unmarried; took strychnine. Love affair.

April 27—Mrs. Agnes Trotter, Spring Lake, 25 years old, widow; shot herself through the heart. Accused of making trouble in another family.

April 28—Mrs. James Simmons, Otter Lake, quite young, married; jumped with her two-year-old child in front of the fast express; both were killed. Unbalanced mind.

April 28—Bert Pelton, Escanaba, 15 years old, unmarried; shot himself through the heart. Naturally despondent; was reprimanded by parents.

April 28—John G. Manchester, Wayland, 45 years old, married; shot himself through head with rifle. Despondency over financial matters.

April 28—George E. Epp, Grand Rapids, quite young, married; shot himself. Despondency and liquor.

May 2—Mrs. E. Heldt, Detroit, 60 years old, widow; took paris green. Grieved over the death of her husband.

May 3—Frederick Belowsky, Detroit, 45 years old, married; severed arteries of wrist with razor. Despondency over inability to find work.

May 3—Christian Enright, South Lyons, 60 years old, married; took strychnine. Financial matters.

May 3—Nels Hansen, Ludington, 62 years old, married; took poison (kind not given). Domestic trouble.

May 4—D. C. Clapp, Owosso, 55 years old, married; shot himself through head. Naturally despondent.

May 5—Andrew Fransen, Midland, 58 years old, married; shot himself. Mental trouble.

May 7—Mrs. Wilhelmina Thomas, Detroit, 65 years old, widow; hung herself. Despondency.

May 10—Andrew C. Bruce, Lapeer, 78 years old, married; drowned in cistern. Cause not known, probably insane.

May 11—Mrs. George Peylon, Detroit; shot herself through head. Cause not given.

May 11—Carrie Gordner, Pinckney, 24 years old, unmarried; drowned herself in mill pond. Despondency caused by ill health.

May 12—Louisa Guenther, Wayne, unmarried; stood on the railroad track in front of the fast train. Despondency.

May 13—Edgar Randall, Coloma, 55 years old, married; hung himself. Mentally deranged.

May 14—A. B. Buell, Twin Lakes, 76 years old; shot himself. Despondency.

May 15—John Erzthaler, Detroit, 58 years old, widower; hung himself. Grief over loss of wife.

May 25—Charles G. Fleischmann, Detroit, 40 years of age; hung himself. Cause unknown.

May 25—Mrs. Augusta Hagens, Detroit; hung herself. Despondency.

May 25—John G. Jacobs, Ogden, age 24 years, shot himself. Thought to be accidental.

May 28—Alice Travis, Bay City, 18 years of age; took carbolic acid. Despondency.

May 29—Fred R. Luce, Grand Rapids, 40 years of age; shot himself. Ill health.

May 29—Carl Kobbe, Detroit, 58 years of age; hung himself. Despondency caused by drink.

May 31—Joseph St. Aubin, Detroit, 64 years of age; shot himself. Despondency.

June 4—John Karrer, of Ionia county; shot himself, married. Cause unknown.

June 9—Henry Sanders, Hopkins Station, 34 years of age, unmarried. Despondency.

June 9—Grace Kront, Grand Rapids, 20 years of age; drank aconite. Love affair.

June 11—William Boekeloo, Kalamazoo, 23 years of age; shot himself. Ill health.

June 17—E. J. Hermann, Detroit, 35 years of age; took poison. Dissipation.

June 18—Thomas Ward, Marshall, 50 years of age; took paris green. Despondent over the loss of his wife.

June 21—Chas. F. Roewe, Mt. Clemens, age 53 years; by hanging. Despondency.

June 24—James Lynd, Detroit, 62 years of age; shot himself. Domestic troubles.

June 26—Francis Dee, Hart; shot himself. Ill health.

June 25—Mrs. Leon Lefevre, Detroit, 46 years of age; by drowning. Unbalanced.

June 27—Philip Henschell, St. Charles; took morphine. Domestic trouble.

July 3—Alex Heinalt, Saginaw, 20 years of age; took morphine. Ill health.

July 3—E. L. Arthur, Battle Creek; stepped in front of locomotive. Cause insomnia.

July 6—John Flannigan, Allegan; stepped in front of engine. Despondency.

July 6—Ella Sanders, Battle Creek; took poison. Cause, despondency.

July 8—Albert Hainer, Millington; committed suicide by drowning. Disappointed in love.

July 8—Mrs. Martha Galloway, Detroit, age 38 years; committed suicide by drinking wood alcohol. Domestic troubles.

July 10—Mrs. William Kessler, Coldwater; leaped from windmill. Unbalanced.

July 10—Calvin Frank, Jackson, 26 years of age; committed suicide by turning on gas. Cause unknown.

July 11—Clarence L. Cane, Battle Creek; committed suicide by taking rat poison. Ill health.

July 12—Frank Walker, Cheboygan, 45 years of age; shot himself. Cause unknown.

July 14—Hatt Mattson, Laird; hung himself. Cause, dissipation.

July 15—Herman Roglem, Marinette; committed suicide by cutting his throat. Cause unknown.

July 16—Mrs. M. H. Orr, Saginaw, age 29 years; drank carbolic acid. Cause unknown.

July 25—Miss Belle Lomax, Grand Rapids, 25 years of age; committed suicide by cutting her throat. Unbalanced.

July 23—Francis W. Cole, Detroit, 23 years of age; committed suicide by shooting himself. Despondency.

July 23—Arthur Taylor, Kalamazoo, 27 years of age; committed suicide by shooting himself. Dissipation.

July 24—Annie McTavish, Detroit; committed suicide by drinking carbolic acid. Dissipation.

June 27—William Blackett, Battle Creek, 65 years of age; committed suicide by hanging himself. Despondency.

August 1—Fred C. Mueller, Lansing; committed suicide by drinking carbolic acid. Despondency.

August 2—Harry A. Griswold, Detroit, 22 years of age; committed suicide by drinking carbolic acid. Despondency.

August 8—William Kinsman, Sparta, 55 years of age; committed suicide by shooting himself. Ill health.

August 8—Mr. Noret, Shelby; committed suicide by drinking carbolic acid. Cause unknown.

August 24—Miss Lilian Woodruff, Tecumseh, 19 years of age; committed suicide by hanging herself. Love affair.

August 2—Clarence Shearer, Coldwater; committed suicide by drowning. Cause, unbalanced.

August 1—Mrs. Gertie Sanders, Jackson; committed suicide by turning on the gas. Domestic troubles.

August 27—Frank Ching, Miners Mills, 55 years of age; committed suicide by hanging. Despondency.

August 31—Miss Lena Tunke, Grand Rapids, 24 years of age; committed suicide by throwing herself in front of moving train. Cause unknown.

September 6—Wm. A. Florence, Constantine, 50 years of age; committed suicide by shooting. Despondency.

September 6—Mrs. James Newton, Flint; committed suicide by shooting herself. Cause unknown.

September 8—Mrs. Margaretha Buchta, Detroit, 72 years of age; committed suicide by hanging. Ill health.

September 10—Dr. T. A. Boyer, Battle Creek, 50 years of age; committed suicide by shooting. Unbalanced.

September 15—Mrs. August Schmidt, Constantine, aged 60 years; hung herself. Unbalanced.

September 19—Daniel Engle, Detroit, age 63, married; hung himself. Despondency.

September 25—Robert W. McCleary, Jackson, age 19; shot himself. Despondency caused from having trouble with his father.

September 28—John Liss, Wyandotte; shot himself. Feared blindness.

September —William Minnis, Williamston, 60 years of age, married; hung himself. Cause unknown.

October 1—Irring Herments, Traverse City, 14 years of age; took paris green. Anger.

October 4—John Hoetger, Detroit, 62 years of age; placed his neck on railroad track and was run over by engine, cutting off his head. Ill health.

October 5—Katie Hutchinson, Grand Rapids (colored), age 21; took strychnine. Cause unknown.

October 5—Jacob Kinsell, committed suicide at Detroit, September 20, by shooting himself. Cause unknown.

October 8—George Heinbeck, Ann Arbor; hung himself. Unbalanced.

October 9—Charles Bassett, Madison, 70 years of age; hung himself. Unbalanced.

October 16—Tip Bradley, Delton; hung himself. Cause unknown.

October 16—Kerry Eberhard, Colon; shot himself. Despondent.

October 19—Harrison Trent, Lansing, age 65; committed suicide by drowning himself in the Grand river. Unbalanced.

October 19—Mary Lyons, Detroit, 18 years of age; drank carbolic acid. Love affair.

October 21—Mrs. J. Beacon, Detroit, 48 years of age; took paris green. Despondent.

October 20—Mrs. Lena Brady, Edwardsburg; drank carbolic acid. Cause unknown.

October 22—Mrs. Mary E. Lemos, Battle Creek; shot herself. Unbalanced.

October 22—Mary H. Brown, patient at the Eastern Michigan Asylum; strangled herself with a piece of sheeting. Insane.

October 24—Robert Hubbard, Pulaski; shot himself. Cause unknown.

October 24—Ben Wilson, Manistee; hung himself. Despondent on account of being under arrest.

November 1—H. B. Proctor, Grand Rapids; took laudanum. Despondent.

November 3—Mrs. Samuel Weaver, Lee township; hung herself. Grief over the death of a daughter.

November 7—Mrs. John Heinbecker; committed suicide by drowning. Unbalanced.

November 10—Edward J. Ellis, Detroit; committed suicide by drowning. Unbalanced.

November 11—Truman Boldey, Summit township; took paris green. Despondent.

November 14—Christ Munge, Detroit; committed suicide by hanging himself. Despondency.

November 25—Mrs. A. R. Culver, age 38, Sturgis; committed suicide by shooting herself in the temple. Unbalanced.

November 26—Chas. Davis, Galien; committed suicide by shooting himself. Dissipation.

December 5—John Goodell, Romeo, age 96 years; hung himself. Cause unknown.

December 8—Adrian DeCam, Grand Rapids; committed suicide by hanging. Cause unknown.

December 8—Edward Warner, Plymouth, married; committed suicide by taking cyanide of potassium. Ill health.

December 10—Henry Juiberet, 65 years of age, Ludington; shot himself. Despondency.

December 12—James Tripp, aged 20 years, Tipton; while ill with typhoid fever shot himself near the heart with a shot gun. Was delirious from fever.

December 13—Anthony Goughan, Battle Creek; committed suicide by jumping from window. Ill health.

December 15—Miss Myra Clapp, Genesee; committed suicide by drowning. Ill health.

December 19—John Keck, 33 years of age; committed suicide by taking poison. Domestic troubles.

December 27—Wendell Otto, of Saginaw; shot himself. Despondency.

December 27—Nellie Leys, 19 years of age, of Grand Rapids; committed suicide by drowning. Cause not known.

December 28—Flora Duncan, 22 years of age, Detroit; committed suicide by taking morphine. Dissipation.

ATTEMPTED SUICIDES IN MICHIGAN IN 1900.

There were 90 persons in Michigan who attempted suicide in 1900, of which 57 were males and 33 females. Of those who attempted suicide 17 were from the city of Detroit.

MANNER OF ATTEMPTED SUICIDES.

Cutting throat	13
Poison	52
Shooting	10
Jumped into cistern.....	1
Ate glass	1
Turned on gas	3
Jumped from train	1
Jumped into river	2
Hanging	3
Drowning	1
Cutting artery	2
Beating head against brick wall.....	1
Total	90

Of the 52 who attempted suicide by taking poison, 9 took morphine; 9 laudanum; 8 carbolic acid; 6 chloroform; 6 paris green; 5 strychnine; 1 opium; 1 aconite; 1 iodine; 1 bichloride of mercury; 1 arsenic; 1 rough on rats; 1 chloral; 1 sugar of lead; 1 unknown.

CAUSES ASSIGNED.

Despondency	20
Domestic troubles	18
Unbalanced	11
Love affairs	8
Ill health	5
Dissipation	5
Intemperance	3
Financial difficulties	1
Anger	3
Unknown	16
Total	90

PERSONAL DATA OF ATTEMPTED SUICIDES.

January 3—Louis Johnson, Iron Mountain, 27 years old, unmarried; cut his throat with a piece of tin. Was confined in jail at the time.

January 4—Mrs. Josephine Wheelock, married; took paris green. Straightened circumstances.

January 21—Verne Friday, Pontiac, 23 years old, unmarried; tried to blow out his brains. No cause known.

January 23—Jessie Dove, Cedar Springs, 14 years old, unmarried; took chloroform. Grandfather reprimanded her.

January 24—Mrs. James Jones, Sand Hill, married; attempted her life with both carbolic acid and a knife. Despondency over business matters.

January 29—Asa Brantmyer, Battle Creek, 30 years old, unmarried; took chloroform. Could not find work and became despondent.

February 2—William Daley, Detroit, 40 years old; cut his throat with a jackknife. Intemperance.

February 6—C. M. Taylor, Alma, 50 years old, married; cut his throat with a razor. Cause unknown.

February 6—Frank Tamblin, Benton Harbor, middle aged, married; jumped into cistern. Thought to be insane.

February 17—John Schairer, Benton Harbor, young, unmarried; cut his throat. Love affair.

February 23—George W. Buhl, Ann Arbor, married; attempted the life of his wife and himself with a revolver. Domestic trouble.

March 5—Emmet L. Branch, Detroit, 38 years old, married; attempted the life of his wife and self with a 32-caliber revolver.

March 7—Harry Johnson, Detroit, 21 years old, unmarried; took poison, iodine. Was confined in jail and ill.

March 10—George Swan, Detroit, young, married; took laudanum. Domestic trouble.

April 7—Henry E. Hamberger, Detroit, young, unmarried; cut his throat with a razor. Adjudged guilty of murder and probably insane.

April 10—Mrs. Nellie Green, Kalamazoo, married; took powdered opium. Love affair.

April 24—Martin Van Hoff, Grand Rapids, married; attempted his wife's life by striking her over the head with a frying pan, and his own by cutting his throat with a razor. Probably insanity.

May 3—Edward Osgood, Benton Harbor, unmarried; ate half a wine glass and commenced on a beer glass. Love affair and liquor.

May 4—Mrs. A. E. Barry, Otsego, married; took strychnine. Cause unknown.

May 9—George Fishell, Homer; shot himself. No cause yet known.

May 11—Minnie Rettar, Detroit, 17, unmarried; took paris green. Cause not known.

May 12—Rufus Bird, Detroit, 45 years old; took laudanum. Could not overcome his appetite for whisky and preferred death.

May 15—Mrs. Fannie Crandall, Jackson, married; took laudanum and chloroform. Charge of perjury in connection with the Hiltz-Coy-Kendall case.

May 24—W. J. Cook, Bay City, married; attempted suicide by taking a dose of paris green. Domestic troubles.

May 29—Goldie Gardner, Benton Harbor, 18 years of age; attempted suicide by jumping from train. Cause unknown.

May 29—James Groesser, Keswick, 37 years of age, married; attempted suicide by taking paris green. Unbalanced.

June 12—Mrs. Minnie Walthers, Ann Arbor, 23 years of age; attempted suicide by taking bichloride of mercury. Love affair.

June 12—Franklin Seybert, Kalamazoo, unmarried; attempted suicide by taking strychnine. Love affair.

June 12—F. S. Clute, Bay City; tried to jump in river. Unbalanced.

June 14—David Tann, Jackson (colored); tried to commit suicide by inhaling chloroform. Ill health.

June 24—H. J. Hartson, Grand Rapids, 32 years of age; tried to commit suicide by taking aconite. Dissipation.

June 26—Philip Fanshaw, St. Charles, 55 years of age, and married; tried to commit suicide by taking morphine. Domestic troubles.

June 24—S. S. Hearn, Saginaw, 67 years of age, married; jumped into the river in an attempt at suicide. Ill health.

July 2—Mrs. Amelia Black, Ypsilanti; attempted suicide by taking arsenic. Domestic troubles.

July 4—Mrs. Maud Polhous, Detroit; attempted suicide by taking a dose of morphine. Despondent.

July 6—Frank Teau, Bay City, married; attempted suicide by taking rough on rats. Domestic troubles.

July 8—Otto Deitrich, Detroit, married; attempted suicide by cutting his throat. Domestic troubles.

July 9—Carrie Penny (colored), Battle Creek; attempted suicide by taking chloroform. Love affair.

July 6—Gus Weber, Centerville, married; attempted suicide by taking paris green. Anger.

July 9—D. H. Hearn, Saginaw, 38 years of age, married; attempted suicide by shooting himself. Domestic troubles.

July 24—Cora Hall, Detroit; attempted suicide by taking carbolic acid. Despondency.

July 11—John Getter, Lansing, married; attempted suicide by cutting his throat. Ill health.

July 6—Clara Gaffney, Manistee, 19 years of age; attempted suicide by shooting. Despondent.

July 27—Mrs. Louisa Martin, 38 years of age; attempted suicide by drinking carbolic acid. Domestic troubles.

July 28—Mrs. Frank Fairbanks, Bay City, 19 years of age; attempted suicide by taking carbolic acid. Love affair.

July 29—Fredrick Jago, Detroit, 57 years of age; attempted suicide by shooting. Despondency.

August 3—Mrs. Ella Ashley, Detroit, 30 years of age; attempted suicide by taking morphine. Despondency.

August 6—Dan Goodenough, Hartford; attempted suicide by taking morphine. Dissipation.

August 7—Mrs. Bessie Simons, Detroit; attempted suicide by taking laudanum. Cause unknown.

August 10—Jos. Valoe, Benton Harbor, 45 years of age; attempted suicide by taking morphine. Dissipation.

August 20—Chas. Laning, Port Huron; attempted suicide by turning on the gas. Despondency.

August 27—Fred Eads, Adrian, 16 years of age; attempted suicide by hanging. Anger.

September 8—Frank Foreman, of Newton township, 55 years of age; attempted suicide by hanging. Despondency.

September 6—Mrs. Rennie Greenough, Owosso; attempted suicide by taking morphine. Domestic troubles.

September 6—A. Warren, Allegan, married; attempted suicide by inhaling chloroform. Domestic troubles.

September 8—Franklin E. Mansfield, Detroit, married, 48 years of age; attempted suicide by shooting himself. Dissipation.

September 14—Joe Eller, Alpena, married; attempted suicide by taking strychnine. Cause unknown.

September 12—Mrs. Emma Johnson, Lapeer; attempted suicide by shooting herself. Despondency.

September 25, 1900—Charley Esterling, Baldwin, age 19 years, a prisoner; attempted suicide by hanging. Despondent.

September 27—R. R. Rabbitt, of Williamsburg; tried to end his life at Marinette by drowning. Unbalanced.

September 29—George Mabus, Battle Creek, 26 years of age; took paris green. Domestic troubles.

October 2—F. W. Kauffman, Jackson, age 22 years; tried to end his life by shooting himself. Love affair.

October 3—Mrs. Clara Applefeld; tried to end her life by turning on the gas. Unbalanced.

October 3—Mrs. Peter Brockway, Adrian; took laudanum and morphine. Domestic troubles.

October 4—Chas. Turostowska, Detroit; cut his throat and jumped into the river. Crazed with drink.

October 6—George A. Smith, Pontiac; took chloral. Cause unknown.

October 16—John Ryan, age 35 years, prisoner in Jackson prison; tried to end his life by cutting his throat with piece of looking glass. Despondent.

October 16—Mrs. Louis Mills, Essexville, after giving a dose of laudanum to her four-year-old daughter, from the effects of which the child died, attempted to end her own life in the same manner. Unbalanced.

October 17—Mrs. J. Johnson, Battle Creek; took morphine. Domestic troubles.

October 24—Mrs. George Beaty, Goodison; attempted to take her life by drinking carbolic acid. Domestic troubles.

October 25—Mrs. Jermina E. Stewart, Detroit; attempted suicide by taking laudanum. Despondent.

October 26—Peter L. Archunbacher, Jackson; tried to end his life by taking laudanum. Domestic troubles.

October 31—An unknown woman, of West Bay City; attempted suicide by drinking carbolic acid. Cause unknown.

November 1—Henry Younger, Port Huron; slashed his throat with a pair of scissors. Despondent.

November 2—The above named made a second attempt to end his life by sawing his throat with a piece of iron. Unbalanced.

November 11—Frank Flummerfelt, Orion village; attempted suicide by cutting arteries of his wrist. Cause unknown.

November 16—Abram L. Bosenlark, married, Adrian, age 37; attempted to commit suicide by swallowing an ounce of chloroform and laudanum. Despondent.

November 3—Mrs. Sarah L. Hoagg, Detroit; attempted suicide by cutting her throat with a razor. Unbalanced.

November 23—Frank Marsh, middle age, Battle Creek; took morphine. Despondency caused by drink.

November 27—Mrs. Lillian Cummings, Bay City; took laudanum. Domestic troubles.

November 29—Cyrus Kemble, Niles; tried to murder his wife and then attempted to dash out his brains against the cellar wall. Deranged.

November 30—Battle Creek, an unknown young man attempted suicide by drinking chloroform. Despondency.

December 1—William McKay, Detroit; a morphine eater, made an effort to end his life by taking poison. Despondency.

December 4—Herman Oatman, Allegan; made an attempt to swallow strychnine, but was prevented. Despondency.

November 27—Rudolph Parkhurst, Hamilton, 50 years of age; attempted suicide by opening an artery in his arm. Domestic troubles.

December 8—Anna Pelkey, Plymouth; attempted suicide by taking poison. Disappointed in love.

December 8—Will Baxter, Plymouth; took strychnine with suicidal intent. Ill health.

December 13—Ivah Storkdale, Owosso; took laudanum. Cause unknown.

December 18—Lottie Price, Detroit; attempted suicide by taking sugar of lead. Dissipation.

December 27—Mrs. Louis Ponton, of West Bay City; swallowed a quantity of carbolic acid with suicidal intent. Domestic troubles.

BOILER EXPLOSIONS, 1900.

Number of explosions..... 6

CAUSE OF EXPLOSIONS.

Water turned into empty boiler.....	1
Low water	1
Running away of engine	1
Unknown cause	3

Total	6
-------------	---

Number killed	8
Number injured	8

ENGINEER KILLED.

Caro, February 6.—The boiler of a saw mill at Akron blew up, killing Thomas Emerson, the engineer, and seriously if not fatally injuring another employe. Cause of the explosion not known.

ANOTHER MAN KILLED.

Carson City, March 9.—The boiler in the old planing mill known as the Sherman mill, owned by J. H. Waters, blew up, killing Irving Waters, son of the proprietor. The mill was badly wrecked. Cause of explosion: water turned on when there was no water in the boiler.

DOMESTIC INJURED.

Detroit, March 29.—A 30-gallon boiler used for heating Mrs. Keel's three-story boarding house blew up, injuring the colored domestic. Cause of explosion due to low water in the boiler.

TWO MEN KILLED,

Sylvester, April 30.—The boiler in John E. Riter's saw mill exploded, killing Daniel Zimmerman and James Moffitt and probably fatally injuring Oscar Zimmerman. The mill was completely demolished. Cause of explosion unknown.

TWO MEN KILLED AND ONE FATALLY INJURED.

Traverse City, June 9.—A boiler explosion occurred near Fife Lake in the saw mill owned by C. F. Reed, which was completely demolished,

also killing two men, fatally injuring one and seriously injuring one other. The cause of the explosion is unknown as the engineer claims the boiler was full of water at the time of the explosion.

FIVE MEN SERIOUSLY INJURED.

Traverse City, November 6.—A boiler in the Wylie Cooperage Company's plant, near Interlochen, exploded, fatally injuring one man and seriously injuring four others. Cause of explosion, running away of an engine in the heading department.

STRIKES IN MICHIGAN SINCE JANUARY 1, 1900.

A synopsis of strikes that have occurred since January 1, 1900, has been prepared by the Commissioner of Labor and presented in bulletin form for the information of the public.

These statistics were gathered by special canvassers, employed by the Labor Bureau, and also from clippings taken from the different newspapers of the State. Some of these strikes yet remain unsettled at this date, and no information is at hand as to the actual condition.

KALAMAZOO, January 1.—A strike of short duration occurred at the French skirt factory at Kalamazoo over an inequality of wages but was soon settled by a concession on the part of the employes, and but little inconvenience was experienced. The girls employed at the factory receive from \$1.00 per day to \$12.00 per week.

OWOSSO, February 21.—The employes of the Owosso Coal Company went on a strike because the company would not discharge its engineer, claiming he was purposely careless in handling the cage. R. E. Travis, the superintendent, refused to comply with the request and 35 miners went out.

GRAND RAPIDS, March 12.—Twenty-five spindle carvers employed by the Hake Manufacturing Company went out on a strike. The cause was an objectionable work sheet which, as the men claim, is virtually a "task" system. There are 125 spindle carvers in the city and all but nine or ten are members of the union.

SAGINAW, March 12.—About 125 employes of the Palmerton Woodenware Company went out on a strike for an increase of wages of about 10 per cent which the company refused to accede to and on Thursday following the plant was shut down. On April 12 about three-fourths of the strikers resumed work under practically the same conditions that existed before they quit work.

BAY CITY, April 2.—Several small strikes among the coal miners of Bay county took place over the deficient work clauses adopted in the scale for District No. 24, U. M. W. of A., but were all amicably settled with but little loss to either the mine owners or the men.

HOUGHTON, April 7.—One hundred miners employed at the Franklin Junior Mine went on a strike. The demand of the strikers was for an advance in wages of 10 per cent, and on the Monday following an agreement was reached whereby the miners received an advance of 6 per cent and the men went back to work.

BENTON HARBOR, April 24.—Several teamsters employed in hauling dirt on a paving contract went on a strike in consequence of an order requiring them to put side boards on their wagons, but most of

them complied with the order the following day and resumed work. They were receiving \$3.00 per day.

SAGINAW, May 1.—Between 75 and 100 carpenters employed by the builders of Saginaw went out on a strike for an eight-hour day. This did not affect carpenters employed in shops and factories, but stopped all work as far as construction of buildings were concerned. The question of wages did not enter into this strike.

PORT HURON, May 1.—About 250 employes of the Jenks Shipbuilding Company went on a strike over the refusal of a demand for an increase of wages from \$1.25 per day to 15 cents per hour. The men are organized and many conferences were held with the company, resulting in an agreement whereby the men returned to work May 4 at an increase in wages of 25 cents per day, the company reserving the right to discharge any whom they consider not worth that amount. The employes of the new electric railway struck for an increase of wages at the same time as the shipbuilding employes and for practically the same reason. They returned to work on May 4 on the same terms as the shipbuilders and at the same wages.

LUDINGTON, May 1.—The stevedores employed by the Pere Marquette Railroad Company made a demand for an increase of wages from 20 to 30 cents per hour, which the company refused to grant, upon which the men went on a strike and remained out until May 21, when nearly all went back to work at the original wage of 20 cents per hour.

DETROIT, May 1.—The core-makers struck for an advance of 50 cents a day; demands were not granted. Their places being filled with non-union men.

BAY CITY, May 3.—The employes of the box factories of Bay City struck for an increase of 25 cents per day. There are four factories affected by the strike and about 250 men are out. On May 17 a satisfactory settlement was brought about and the men all returned to work.

DETROIT, May 4.—Truck drivers went out on a strike, which is yet unsettled.

Several strikes have occurred in the copper districts, occasioned by a demand on the part of the miners for an increase in wages.

The miners employed at the Quincy mine demand an advance in wages, and, on being refused, 800 walked out. On May 17, they returned to work at an advance of 10 per cent as a compromise.

On May 10 a number of men were thrown out of work by a strike of the trammers at the Osceola mine, upon the refusal of an increase in wages of 10 per cent, but the strikers resumed work May 15, having accepted a proposition of the company for a 5 per cent increase.

DETROIT, May 11.—Seventy-five employes of Park, Davis & Company walked out. Their demand being for time and a half for all overtime, which was refused. Employes from departments taking their places.

May 11.—Photo Engravers' Union ordered a strike in the shop of Van Leyen & Hensler, to enforce recognition of the union and payment of its scale. Five members of the union and five non-union men came out, and after one week the firm yielded to the demands of the union.

ISHPEMING, May 12.—Sixty trammers at Winthrop Mine quit work, as wages were unsatisfactory. New men taking their places at old wage rate.

HOWELL, May 14.—The section hands of the Pere Marquette Railroad Company struck for an advance of 15 cents a day. An agreement of 10 cents a day was reached and the men resumed work.

On May 14 the trammers and miners at the Arcadian Mine, near Houghton, to the number of 600, went out on the refusal of a 20 per cent increase in wages, but after being out two days accepted as a compromise an increase of \$4.00 per month, and all went back to work.

DETROIT, May 14.—The longshoremen at the Northern Steamship Company's dock struck, commanding the union men to stop work. After a consultation an agreement was made to hire only union men when they returned to work at the same wages.

BELDING, May 22.—Thirty girls of Belding Bros. & Company's silk mills went out on a strike, demanding 10 per cent advance in their wages. A few days after they returned to work without their demand being granted.

DETROIT, May 22.—Ten members of the Carpenters' Union, in the employ of James Roach, were ordered on strike on the refusal of Roach to sign the union agreement or pay the scale; unsettled.

SAGINAW, June 13.—Ice peddlers went on a strike, the result of a demand for higher wages. The strike was settled by the demand being partially granted.

BAY CITY, June 21.—Workmen employed at the bridge approach, struck for an increase in wages of 25 cents a day, on account of lost time from steam concrete mixer getting out of order, which they were not paid for. Demands not granted.

DETROIT, July 3.—The union longshoremen struck on account of non-union men getting but 25 cents an hour in violation of contract signed by dock managers whereby they are to be paid 30 cents per hour.

SAGINAW, July 11.—The miners employed by the Northwestern Coal & Transportation Company go out on a strike demanding their railroad fare of 5 cents a day for round trip be paid. Request granted and men returned to work.

HARBOR POINT, July 15.—Steward Cunningham reprimanded one of the dining room girls, whereby she demanded an apology. It being refused all the girls served notice unless it was forthcoming they would quit; still being refused, they walked out. Other girls have taken their places.

MARINETTE, July 17.—The lath pullers struck for return of the 20 per cent in wages. No settlement.

MUSKEGON, July 30.—The employes of the Guilde mill of the Champion Iron & Steel Company refused to go to work, claiming wages paid were not according to scale adopted. The management claim they were paid according to new scale.

MARINETTE, August 22.—Thirty street shovelers struck, demanding an increase of 25 cents a day, claiming they are worked too hard and ought to get more than \$1.50 per day. New men take their place.

BATTLE CREEK, September 5.—Thirty-seven carpenters on the Post building struck for an advance of 50 cents a day. Request not granted.

DETROIT, October 4.—Fifty employes of the Diamond Match Factory out on a strike, demanding an increase of 10 cents a day, which the company did not accede to.

INDUSTRIAL STATISTICS.

Milan, January 2.—The Hoop Company is ready for operation. The plant cost \$15,000 and is the largest of its kind in this section of the middle west.

Northville, January 13.—The Northville Condensing Company contemplates the addition of cheese making machinery, which move would provide a steadier market for farmers.

The Northville Milling Company and the Northville Dowel works are each planning to enlarge their plants as they are taxed to their fullest capacity.

Grand Rapids, January 18.—The moving of the Midland Plaster & Cement Company from Kansas City to Grand Rapids will make the latter the greatest plaster headquarters in the United States.

Pontiac, January 18.—The Pontiac Sheet Metal Manufacturing Company is organized for the manufacture of the Sherman dish cleaner with a capital stock of \$40,000, all paid in.

Owosso, January 23.—The Owosso Carriage factory is completed and has started in all departments with a force of 150 men.

Saginaw, January 29.—The Michigan Wheelbarrow & Truck Company, organized with a capital of \$25,000, expects to have its plant in operation in 90 days.

Battle Creek, February 4.—The wages paid employes of the factories in this city for the week aggregate \$50,000.

Benton Harbor, February 24.—Arrangements have been made whereby Benton Harbor will have a silk waist factory, employing 25 women to start with. The company has orders for 1,000 waists, to be made at once.

Grand Rapids, March 1.—The Keeler Brass Company, of Middleville, has moved its plant to Grand Rapids, where more convenient quarters are to be had.

Detroit, March 9.—Detroit is one of the greatest brass centers in the country, employing about 4,000 men, and the output brings in at least \$6,000,000 a year.

Eau Claire, March 20.—New industries are secured and attention is called to the coal mines on the Chauncy Reese farm, which will be operated this season by a strong company.

The West Michigan Nursery Company has decided to build many new cottages for its employes, which fact alone means an increase of population by one-half.

Niles, March 24.—Mayor Gilbert has secured for Niles a knitting factory which will employ 150 girls. The Lakeside Knitting works, of

Michigan City, Indiana, employing 700 girls, being unable to obtain more help, decided to start a branch factory here, making four factories secured for Niles this season.

Cheboygan, March 27.—The Business Men's Improvement Association has secured a horse collar factory, to employ 25 hands.

Three Rivers, March 29.—The Armstrong-Durst Machine Works, of Chicago, has been secured to locate here.

Grand Rapids, March 30.—The National Match Company, of Chicago, has purchased the property of McCord & Bradfield and will open up a match factory in 90 days, employing 150 hands.

Muskegon, April 9.—The tin plate mill of the Champion Iron & Steel Co., and the paper mill of the Central Paper Company are getting into shape for operation, and spring will find the manufacture of tin plate and paper begun.

Grand Rapids, April 22.—The Felt Boot Company of this city will embark in the manufacture of rubber boots and shoes, employing 75 men.

Battle Creek, May 11.—A number of capitalists have organized the Battle Creek Pure Food Company with a capital of \$1,000,000. They have bought seven acres of land and will ultimately erect a plant.

Grand Rapids, May 17.—The Michigan Iron Works have increased their capital stock \$50,000, expecting a large trade. They have trebled the number of employes.

Milan, May 18.—The Model Hoop Company is increasing their plant by adding stave and heading machinery and expect to employ 165 men.

Grand Rapids, May 19.—The Thomas Canning factory expects a large run, as the outlook for a big crop of fruit is bright. They expect to employ about 500 hands, putting up 3,000,000 cans of fruit and vegetables.

Flint, May 19.—The Factory Improvement Company closed a contract with the Armstrong Manufacturing Company to locate here. It is the intention to double the capacity, giving employment to 225 men.

Royal Oak, May 19.—While boring a well on Henry Langer farm, at a depth of 96 feet a wonderful vein of gas was struck with a pressure of 40 pounds to the square inch. Another one will be bored and cased and the gas used for heating and lighting.

Flint, May 19.—The Flint Improvement Company has taken options on 420 acres of land, platting the same into 2,200 lots, which sell at \$150 each.

The Imperial Wheel Company, of Jackson, employing 400 hands, has also located here.

Niles, May 21.—The four factories secured during the year have added rapid growth to the city.

Detroit, June 18.—The Barnard Coal Company, in sinking a shaft, struck a vein of coal at a depth of 60 feet being of fine quality.

Saginaw, June 23.—The committee received word from the glass manufacturers that they would be ready to close a deal by July 1, and would commence the construction of a factory at once, employing 150 hands.

Bay City, June 23.—Ross Bros'. saw mill at Beaverton will begin operation at once, the mill being 30x100 feet.

Grand Rapids, June 23.—The work of remodeling the Rowson mill

and preparing it for a match-making plant, goes on, and it will be ready for business in 30 days. In addition the company is arranging a large airy room on the second floor for the use of the girls employed to eat their lunches in comfort.

Bay City, June 23.—W. F. Jones, of Alpena, who has been lumbering for 20 years, says he never found it so hard to hire men, and would employ 200 at once if he could secure them.

Pontiac, July 5.—The electric line from Saginaw to Pontiac is expected to be under construction within 30 days.

Bay City, July 5.—Parties who operate a coal mine in this county, being unable to supply the demand, will sink another shaft at once in Zilwaukee township.

Bay City, July 15.—The Valley Coal Mining Company, on their property near Salzburg, has an abundance of fine clay and are placing in position a Berg brick press that has a capacity of turning out 20,000 brick daily.

Battle Creek, July 21.—A great many improvements are noticeable. The Sanatorium, a large stone structure, is nearing completion, as also the Post Tavern, and many other fine buildings are being erected.

Coldwater, August 4.—The growth of manufacturing in Coldwater is evidenced by sending out a train of 36 cars in one day, loaded with different articles of its own manufacture.

Benton Harbor, August 15.—The Benton Fruit Products Company started their factory with bright prospects for a big season's work. A new mammoth steel press with a 2,000 barrel capacity has been added to the plant.

Iron Mountain, August 15.—Hood & Mahoney have bought a large tract of timber and will manufacture staves, heading and maple flooring on a large scale. They have platted a town called Pentoga.

Port Huron, August 28.—The business of the Port Huron Engine & Thresher Co. having increased to such an extent that its plant was not large enough to keep up mill orders, it was decided to erect an addition to it of 100x400 feet.

Muskegon, September 7.—The Champion Iron & Steel Co. has between 500 and 600 men engaged in the manufacture of a product that ten years ago was declared a practical impossibility—American tin. The company is refusing orders short of six weeks, and is turning out approximately 30 tons of tin plate a day.

Detroit, September 7.—The Central Paper Company is making extensive improvements. A large addition is to be added, to be used as a laboratory and office.

Sault Ste. Marie, September 7.—The Lake Superior Power Company is really developing beyond expectation. Instead of a wonderful aggregation of mechanical science with big water wheels, a gateway opens to an undeveloped empire. Excavation has commenced which will take in all the Lake Superior Power Company and which will control over 110,000 horse power, the energy of which has been running to waste for centuries. An immense power house, 1,380 feet long, is to be built.

Benzonia, September 6.—The "Crystal City" is getting to be a great resort. A \$20,000 hotel is to be erected, and great anticipations are en-

tertained for next year. Negotiations are now being made for a sanitarium to be located north of Crystal Lake.

Houghton, September 13.—It was generally anticipated that the census of mine workers would be decreased from last year, owing to the letting out of 800 men by the Arcadian, but instead, it will show a gain of about 50.

Flint, September 15.—It is pleasing to know that the W. F. Stewart Company will build a third new factory, located in the Oak Park Division. The company had to cancel orders, and the outlook demanded a new factory, which will employ 200 men.

Detroit, September 15.—Brown Bros. will erect a cigar manufacturing plant which will excel any other in America in output capacity. There will be 2,000 hands employed. One of the interesting features of the structure is the gigantic dining room for the company officers and employees.

Cedar Springs, September 16.—The village is reaping the benefit of prosperity and will expend \$4,000 in street improvements.

Flint, September 18.—The Flint carriage factories are making elaborate preparations for a big season's business which will exceed that of any other year by several thousand dollars.

Saginaw, September 21.—Dr. W. P. Morgan has a flock of 175 Angora goats on his farm, all of which wintered well. The fleeces are silky and heavy and grow to a length of 5 or 6 inches, marketing at 25 and 50 cents a pound.

Flint, September 24.—The people of Genesee county are awakened to the fact that vast peat bogs are at their command, which is used for fuel. The peat moss, which is taken from the mines, is used for mattresses, and brings \$6.00 a ton, but can be produced for 50 cents a ton.

Warren, September 25.—Representatives of a Chicago house are interesting the people in a canning factory, and \$4,500 of the \$6,700 wanted is already subscribed.

Sparta, September 25.—Along the industrial lines Sparta has the largest folding bed factory in the world, employing a large force of men. They also have several other factories which are doing a thriving business.

Kalamazoo, September 25.—The George Clarke Engine and Boiler Company will erect an addition to their plant, doubling their capacity.

Port Huron, September 25.—The statistics of the manufacturing institutions of Port Huron show that 3,500 people are employed, and the products of the output reaches \$5,000,000 per year. In addition to the above about 800 captains, engineers, firemen, mates and sailors find employment on boats.

Muskegon, September 27.—The Amazon Knitting Company's factory is running at full capacity, having all the business it can possibly do, employing 900 hands.

Detroit, September 28.—The moving of the Boyer Machine Company from St. Louis to Detroit will add one more large industry which will employ 300 hands.

St. Joseph, September 27.—Never has the demand for fruit been so great as the past season. Four steamers leave nightly with 65,000 packages of fruit, and three railroads run two trains each nightly.

Belding, September 28.—The superintendent of the Belding & Hall Refrigerator Co., gives an illustration of good times. His books show the company has paid 112 per cent more for labor the past year than during the 13 months ending September 1, 1896.

Fenton, September 29.—Becker Bros.' local representatives have been working unceasingly for the establishing of a plant for the manufacture of Portland cement in Fenton, and as a result ground is being broken for the erection of buildings. The plant complete will cover 80 acres of ground.

Muskegon, October 2.—The entire contract for the building of the Grand Rapids, Grand Haven & Muskegon Electric railway has been let at a sum aggregating considerable more than \$1,000,000. Work will begin immediately and it is expected the grading of the entire road will be finished before winter.

Grand Rapids, October 2.—The Rubber Boot Plant is now in operation. The factory is lighted by electricity and is equipped to give employment to 300 hands, and will turn out 600 or 700 pair of footwear daily.

Lowell, October 3.—The new shirt factory is now ready for business, having received \$3,000 worth of cloth, the firm being capitalized at \$25,000.

Detroit, October 4.—Westinghouse, Church, Kerr & Co., are preparing plans for a \$400,000 steel car plant for Detroit, which will manufacture street cars.

Bay City, October 6.—Plans for building several new boats at the Davidson shipyards are maturing.

Grand Rapids, October 7.—The furnishing of the Sanatorium of Battle Creek is a flattering testimonial to the Grand Rapids Furniture Company.

Battle Creek, October 7.—The New Phelps Sanatorium was formally opened and attended by 12,000 people. The institute is of colonial style, constructed of field boulders, is six stories high and is designed to accommodate 225 patrons. The furniture cost \$10,000 and consists of oak and mahogany.

Detroit, October 11.—The Sun Vapor Stove Manufacturing Company has filed articles of incorporation and will commence the manufacture of stoves and fittings.

St. Joseph, October 13.—The prosperity in St. Joseph is evidenced by the fact that the Compound Door Company will soon enlarge their plant, being unable to keep up with the increasing number of orders.

Kalamazoo, October 13.—The Phelps & Bigelow Windmill Co. has doubled its sales in the past four years. The greatest part of the products are used in the United States, but regular shipments are made to South Africa, Brazil and Buenos Ayres.

Muskegon, October 11.—Dr. F. W. Garber created a sensation by buying 57 acres of land of Arthur Jones with 400 feet frontage on Muskegon lake and will erect a large sanitarium.

Battle Creek, October 20.—An organization known as the Battle Creek Brewing Company has been formed and work will soon be commenced.

Northville, October 25.—Through the efforts of the Improvement Association, Northville has landed the big shoe factory of Fiske & Olds, which will give employment to 60 hands.

Benton Harbor, October 26.—The Wolverine beet sugar factory started up and is running smoothly, giving employment to 150 hands. The outlook for the sugar output is unusually bright.

Traverse City, October 30.—The Michigan starch factory has begun its season's run, the machinery is in good condition. There are 50,000 bushels of potatoes on hand.

Kalamazoo, October 17.—A new hotel of up to date belongings is to be erected at Kalamazoo, and known as the Hotel Stewart, which completed will cost \$100,000.

Jackson, October 31.—The Jackson Cushion Spring Company has been organized for the purpose of manufacturing springs for buggy and carriage seats.

Battle Creek, October 31.—The Acme Burial Device Company (Limited), has been secured.

Port Huron, October 31.—A new saw factory has been opened up in the building of the Port Huron Land Company.

Battle Creek, November 2.—The Sanitas Nut Food Company (Limited), of Battle Creek, have paid out this season \$10,000 for tin cans, glass jars, etc., in which to pack their goods, and are now adding a large addition to their plant.

Bay City, November 2.—Another large sugar beet factory will be built in Bay City next spring, capitalized at \$600,000.

Big Rapids, November 2.—The stove works of the Michigan Heater Company are now well under way and are capitalized at \$50,000.

Flint, November 6.—The plant of Houran & Whitehead which was recently destroyed by fire will be rebuilt at once, and operations are now in progress.

Iron Mountain, November 8.—The Parkinson Cedar Company will erect a saw mill at Hardwood, Mich., to cost \$35,000.

Hudson, November 10.—A new cement factory is to be built at Hudson, which is intended to eclipse in magnitude anything in the cement manufacturing industry in Michigan.

Constantine, November 12.—The Standard Paper Company, of Constantine, is enlarging its factory by the addition of a large warehouse.

Holland, November 13.—The Wolverine Motor Works, of Grand Rapids, will erect a large factory at Holland which will employ 100 men.

Grand Rapids, November 15.—One of the most complete patent coiled hoop plants of Michigan, will be erected at Grand Rapids by the Michigan Elm Hoop Company giving employment to 100 men.

Pontiac, November 15.—The moving of the St. Johns spring works to Pontiac will add many families to its population.

Benton Harbor, November 22.—A mammoth deal has been completed for the erection of a \$30,000 tin can factory, to take the place of one operated by Morrill & Morley, whose quarters are too small for the increasing business.

Battle Creek, November 26.—The Battle Creek Condensing Company (Limited), has been incorporated for the purpose of manufacturing condensed milk. This will bring to the farmers of this vicinity nearly \$1,000 weekly for milk.

Cement City, November 26.—The Peninsular Portland Cement Company has its plant well under cover. The city six months ago where only farming lands were, now has over 100 houses and 12 stores.

Grand Rapids, November 29.—A. Black & Son, of Hastings, manufacturers of granite and marble monuments, have moved their plant to Grand Rapids, and expect to make it the largest of its kind in Michigan.

Coldwater, December 4.—A new factory is to be erected in Coldwater, for the manufacture of muslin underwear, and will be known as the Arion Manufacturing Company.

Bay City, December 13.—Another large industry in Bay county, will be erected for the manufacture of cement. The plan of the projectors is to build a factory with a daily capacity of 500 barrels.

Saginaw, December 13.—The Saginaw Sugar Company, which has recently been organized with a capital of \$500,000, will begin erecting its plant at once.

Saginaw, December 17.—A large plate glass factory will be located in Saginaw, capitalized at \$350,000. The factory will begin operation July 1 next, and will be the first industry of its kind in the State.

Kalamazoo, December 27.—Another large paper factory will be located at Kalamazoo, capitalized at \$100,000 and will give employment to 100 hands.

TECHNICAL PAPERS

**"The Shorter Work Day in its Effects on the Personal
Character of the Worker."**

"CHILD LABOR IN WISCONSIN."

"Low Water Alarms and Laws Concerning Their Use."

THE SHORTER WORK DAY.

The following paper was read by Hon. John Holbrook, Deputy Commissioner of Labor of Michigan, at the International Convention of Factory Inspectors, held at Indianapolis, Indiana, October 2-5, 1900:

Mr. President and Gentlemen of the Convention:

In what I shall have to say upon the question of a shorter work day, the effect of such shortening upon the worker's personal character, I shall purposely restrict myself to this aspect of the labor problem.

I am not unmindful of the fact that many industries are so necessarily arranged as to compel longer hours of service than others. The effort in such industries to establish a shorter day's work, is one of great difficulty; nor do I forget that there must be a minimum time of labor, below which the hours cannot possibly go without making the industry unprofitable.

Shorter hours, in the face of conditions where the margin of profit is very small, may mean a loss, even if the tendency to larger productions proportionally to shorter hours is admittedly true. The great, general fact cannot be doubted, however, that there has been ceaseless agitation for shorter hours on the part of the laborers and artisans, and that there has been a reduction from thirteen hours to ten, nine and eight hours among the various classes of workers. At the beginning of the century the average work day in all employments may be placed at fourteen hours; at the present time the Federal, and many State employes, have an eight-hour work day, and there are an increasing number of industries falling into the establishment of an eight-hour work day. Thus it will be seen that the work day, since the beginning of the century, has been shortened five or six hours, a decrease very remarkable in the length of hours of labor, and a decrease, also, it may be added, which has been regarded with fear and misgivings by the employers of labor and the managers of industrial plants. It was feared by employers that to reduce the hours of labor was to reduce the quantity of products, and that in the competition for markets, the longer hours would have a decided advantage over the shorter hours; but it has been demonstrated that the lessening of the hours of labor does not within certain limits result in a decrease—rather in an increase of products instead.

Prof. A. F. Walker thus sums up this general conclusion: "It is the general belief of intelligent and disinterested men that every successive reduction of the hours of labor, from fifteen hours to the limit (say ten or eleven hours), in the ordinary mercantile pursuits, affected not a proportional loss of product—not loss at all—but a positive gain, especially if not only the present productive power of the body of laborers is considered, but also the keeping up of the full supply of labor in full numbers and unimpaired strength from generation to generation."

Another phase of the subject has also come to the front gradually in the course of this agitation for shorter work day. It is that the quality of product may be improved by a shorter day, and by this improvement in quality of the product, has come to be considered the improvement of the quality of the laborer himself. The greatest capital invested in any enterprise, commercial or industrial, is not of buildings, machinery, or plants, but in the character of the men or women employed, and on this latter capital stock there is no return possible of large profits without improvement of personal character.

The protest against long and oppressive hours began in the cry for deliverance from conditions which oppressed the soul and body of the workers. We reached the second stage of this agitation when the privilege was asked to have opportunities for leisure,

for enlargement of mental grasp, for the cultivation of the home and home life, and for freedom of self-culture. There was published in 1873 in one of the labor journals a poem voicing this desire:

"We mean to make things over, we're tired of toil for naught,
But bare enough to live on, never an hour for thought;
We want to feel the sunshine, we want to smell the flowers,
We're sure that God has willed it, and we mean to have eight hours;
We're summoning our forces from shop yard, shop, and mill,
Eight hours for work, eight hours for rest, eight hours for what we will.

The beasts that graze the hillside, the birds that wander free,
In the life that God has meted, have a better lot than we;
Oh, hands and hearts are weary and homes are heavy with dole,
If life's to be filled with drudgery, what need a human soul.
Shout! Shout! the lusty rally from shop yard, shop, and mill,
The very stones would cry out if labor's tongue were still.

The voice of God within, is calling us to stand
Erect, as is becoming the work of His right hand;
Should he whom the Maker, His glorious image gave,
Cower, the meanest of His creatures, a bread and butter slave;
Let the shout ring down the valley and echo from every hill,
Eight hours for work, eight hours for rest, eight hours for what we will.

Upon the subject of the desirability of giving shorter hours to labor for the benefit of personal character, I am happy to quote one whose authority to speak upon these matters is unquestioned, especially in this convention. Hon. Carroll D. Wright, the United States Commissioner of Labor, summing up the brief discussion in his book upon "National Sociology," he says: "The general sentiment of all countries where machinery has been employed to any extent, is that with speedy machinery the work day should be shortened so that the wage earners may receive some of the benefits of invention; it is certainly reasonable that in our modern civilization a man should not be compelled to work as many hours as formerly in order to earn a living. With the spread of education and development of intelligence the wage receiver should have more time for his own leisure, recreation, and recuperation." To which I may add, as all our machinery and invention tend to time-saving and increase production, the logical result of this tendency is to a saving of time for laborers themselves, as well as for all other classes.

A reduction in the hours of labor means for the hand workers leisure for self-culture and the arts, moralities, and the refinement of life. Many causes have contributed toward the elevation of the lot of labor, but one great concurrent cause has been the shortening of the hours.

A friend remarked to me recently, "I remember more than twenty years ago visiting extensive coal mines in the anthracite region of Pennsylvania. I watched the long line of miners as they came out of the mines just at sunset. I was told that they went to work just at daylight, and that these long hours generally prevailed. I could see that their faces were sullen, and embruted, but how could it be otherwise? No time to fondle the children in the home, no time for newspapers, no time for a quiet talk with wife and family; just tired, and weary, stolid nerves and body. The hours of sleep snatched between toilsome hours as if nature was doing her best to reduce manhood to the brute where man would place him.

"I saw little children poorly clad, with half-starved bodies, gathering coal, left over from the mine engine, and I could not help reflecting that when I learned that wages were seventy-five cents per day and that only part of the days were work days, that it was a small pittance to support a wife and family, just enough to keep the breath of life in them and the blighting blasts of winter from their shivering bodies."

Surely this was life at its lowest estate, and such conditions I am glad to believe are rapidly being replaced by shorter hours, better wages and better care. But I am not sure it would seem to be pitiable, and it is certainly a set-off against all that may be claimed in favor of the civilizing effects of the economy of coal and iron that in these two industries men who labor should be reduced to the lowest standard of living. It has not been shown that the workers' use of leisure has been less wise and moral than

the use of leisure by the so called leisured classes. They have learned to use their leisure time just as rationally and beneficially as have the wealthier classes, and it would astonish an old-time advocate of constant work for labor, lest "Satan should find mischief for idle hands to do." How wisely and well these very classes have used their spare hours; they have come to be constant and intelligent readers of scientific and mechanical journals. They have formed a disposition to read the best books and literature, and as a rule the working people are reading more serious and thoughtful books than any other class of society.

If anyone will take the trouble to examine the list of books most commonly given out and read in the Carnegie and other libraries of the great industrial centers, he would be surprised to see what a change has come over the intellectual life of the laborer since Kingsley wrote "Alton Locke, Toiler and Poet."

There is such a thing as the moralization of time in reference to its effect upon personal character. The worker who formerly toiled long hours—from morn till night, and six days in the week—left idle on the seventh day, was under great temptation to make a brute of himself on that day. Too tired to do anything, jaded body, starved brain, brutalized soul; there could be no Sunday rest for such; there was nothing left to do but to get drunk as the natural result of a tired and brutalized body and soul.

More leisure has given opportunity for thought and the growth of intelligence which eager minds have not been slow to improve, the newspaper, works of science, and a quiet Sunday, in which more than a small minority attended worship, have been wonderfully helpful and elevating.

Under the old order of things no man could avail himself of Sunday rest and worship. He was too tired and too weary to enjoy them, even if he had the capacity, which was very doubtful. Nor was he fitted for home life and its duties, and consequently missed its moralizing effect.

After all, our civilization depends upon our capacity to be home makers, but under the old regime of labor that was almost impossible; now the shorter hours means longer hours for home society, home culture, and the training of the household. It is a happy augury when we can go into shop or mines, among the railroad employes, or the great manufacturing plants, and be greeted by the light of pleasant, clean, wholesome home-making.

In that way lies the destiny of God; He made us men by the evolution of Home, Fatherhood, Motherhood and Brotherhood.

The promulgation of home life, as has been shown by John Fiske, has in the long ages past raised man above the condition of the brute, and the time, capacity and inclination for home-making are the sign boards which point to a happier and higher future for our whole race.

CHILD LABOR IN WISCONSIN.

The following paper on child labor was read at the fourteenth annual convention of the International Association of Factory Inspectors, at Indianapolis, Indiana, October 2-5, 1900, by Hon. John J. Williams, Chief Factory Inspector of Wisconsin:

Mr. President and Gentlemen of the Convention:

During the last quarter of a century Wisconsin has made great strides in manufacturing. According to the last census report, from 1885 to 1895, a period of ten years, the value of manufacturing plants has increased nearly ten per cent, while in 1895 the value of manufactured products were over \$100,000,000 in excess of 1885. With this increase in the number and value of industrial establishments in the state has also come a great increase in the number of laborers employed (especially young children). In 1885 the number of laborers was 71,185, while in 1895 there were 118,117 employed.

Here is the home of the immigrant. Within our borders flock annually thousands, who, tiring of oppression, leave the fatherland and seek liberty and a home within our great and prosperous state. A part of this vast multitude seek the farming regions, while by far the greater part settle in manufacturing centers and find employment in stores, factories, etc. Coming from lands where little, if any, encouragement is given to the poor to rise above their lowly condition, and life one incessant struggle for existence under oppressive taxation laws, it is natural that their first thought and effort should be given to obtaining work, as the majority of them are very poor, possessing barely sufficient means to pay their passage here. Thus many families are found in which the entire number are at work in the factory or elsewhere. The parents, not having had, in most instances, the privilege of attending school and obtaining a good education themselves, give little or no thought to the educational welfare and advancement of their children, actuated seemingly by the thought that the child should not be better educated than the parent; an illogical thought, surely, and one not in harmony with America's settled principle of education for her boys and girls.

At the outset the bureau had but 4 inspectors, and with this small force to cover the entire state there were many violations of the laws enacted for the protection of working children. Manufacturers, realizing the small danger of detection, violated the laws as often as occasion required to subserve their own ends. Then, again, the laws were often broken by employers who were ignorant of the law, not having been visited by an inspector and consequently not having the statute called to their attention. This impediment in the good work was in a great measure removed by the last legislature by the passage of an act providing for the appointment of additional inspectors. These have been appointed and have greatly facilitated the work of the department in regard to child labor. Inspectors are more comprehensive and thorough, and are instrumental in bringing to light many flagrant violations of the law which had hitherto escaped detection. Some factories have been found in which the smoke and gas were so thick that it was almost impossible for the workers to see each other. Others with dangerous machinery unprotected, imperfect sanitation and inadequate fire protection. Still others in which no attention was given to the age of the child, instances being found of children of 9 and 10 being employed.

One of the greatest difficulties that the inspectors have to contend with is experienced in the enforcement of the law relating to affidavits. Proprietors willing to hire and

parents anxious for work for their children are found, who do not hesitate to try to evade the provisions of the law by false affidavits respecting the age of the child, the parents making the affidavit and the proprietor knowingly and willingly receiving it. Several cases of this kind have been prosecuted and convictions secured. In its work along this line the bureau has been greatly assisted by the different labor organizations throughout the state, which are beginning to realize that this is a vital matter, effecting not only the interests of laboring classes but of the whole state.

Child labor is not a wise or economical expenditure of labor force, nor to the ultimate interest of anyone; but it may be, as often is, to the immediate interest of both employer and parent. Child labor cannot be abolished without reducing incomes to many a family, nor without decreasing the profits of many employers. At the same time it seriously affects the growing generation by taking away from the children their opportunity for development. This is therefore a case where the interests of society, as a whole, comes into conflict with the immediate interests of the individual. Under such circumstances the course is plain. Society must protect itself and cannot afford to permit the employment of its children at the expense of such education and physical development as will fit them for their future duties in life.

If the comforts of the family and the profits of the employer were of greater importance than the effect upon society and upon the children themselves, there could be no valid objection to child labor. Upon the way a child is brought up depends its future welfare, as well as that of society. In order to make the most of life both mind and body must be rightly developed and trained. To this end the child must have schooling and be excused from stunting labor. Early employment in factories and many other places make schooling a side matter only and hard labor the rule. It is these facts which make child labor a social evil. Experience seems to, at least in part, confirm the truth of the statements so often made that the earnings of children seldom permanently increase the total income of the family. The increase in the income through the earnings of the children is often offset by the decrease in the earnings of the father. On the part of the father, child labor offers opportunities for shiftlessness. If the employment of children tended to raise the standard of living as a whole of the families affected, there might be something to say in its favor, but of such tendency there is little or no evidence. A family whose mode of living is once fixed is seldom lifted to a higher plane of life through such means.

Education is of the greatest importance, not only from an economic but from a social and political point of view. In a country like this, where every citizen has a voice in the shaping of local and national government policy and in the settlement of issues, the very existence of our institutions depends upon a broad and intelligent citizenship.

All kinds of labor are not equally injurious to a child. Farming, for instance, is carried on in the open air, and brings those engaged in it in touch with nature. This in itself, has a liberalizing effect. The learning of a trade is perhaps the next best thing to a good schooling. Factory and mine labor, however, has no such redeeming features. In these occupations no opportunities are offered for learning a trade or to acquire any particular skill in special duties. A great deal of such labor is also hard and the hours long. It is invariably true that the welfare of the child for his entire life depends largely upon his childhood, and the breaking down of the physical constitution of the child affects, besides his own life, that of future generations. The child in the factory, in the mine, and in other places of this kind, should be at school. The child on a farm, or who is learning a trade, should also be at school; but in the latter this is not as important as the former. Experience shows that the influence of the factory is much worse than that of the farm, or from labor that is performed under the supervision of parents and the surroundings of home.

Injurious as child labor is to the ultimate interests of society as a whole, the immediate interests subverted by it are so strong that it can only be prevented by the best laws and a strong and competent inspection service for the enforcement of these laws. During 1897 strong efforts were made to prevent the violation of the child labor laws. It soon became apparent that little in this line would be accomplished until additional inspectors were had. In order to obtain some light as to just what was needed in this respect, as well as regarding the number at work, it was decided early in 1898 to practically drop all other inspections and have the inspectors devote their entire time to child labor. The results were obtained from examining 3,360 children, who were employed in 215 establishments, and of whom 155 were illegally employed. From September, 1898, to March, 1899, there were 1,396 children under sixteen years of age

employed in 75 distinct establishments, were covered, and of these 301 children were under fourteen years of age, and thus employed in violation of the law. The work was continued in a slightly different manner from this time on, and up to June 1 many more children were relieved from work. By this time the new laws for the regulation of child labor and authorizing additional factory inspectors had gone into force, and for the first time in the history of this bureau it is now in a position to do effective and proper work in the way of enforcing the child labor laws.

LOW WATER ALARMS AND LAWS CONCERNING THEIR USE.

This paper was read before the International convention of Factory Inspectors at Indianapolis, Indiana, by Hon. Frank C. Base, Deputy Factory Inspector, of Cleveland, Ohio:

Mr. President and Gentlemen of the Convention:

Many of the most conservative and thoughtful manufacturing concerns in the country have for years past adopted low water alarms on their boilers, and the same consideration of the necessity of such appliances on the part of some of our state legislators has resulted in laws requiring their adoption. Disasters without number arising from boiler explosions have occurred during the past decade, the causes of which, while largely speculative, can readily be attributed to the following primary causes: poor material in the boiler, poor design, poor construction, poor fuel, poor water, bad management and care; any one of which, coupled with a case of low water, might result in disaster, entailing enormous loss of life and property, while low water itself, with the best material, construction, etc., may produce equally disastrous results.

Michigan was one of the first states to pass a definite low water alarm law, providing that all stationary steam boilers should be provided with a low water alarm, with a penalty for non-compliance, either of fine or imprisonment. Ohio has followed in the footsteps of her sister state with a similar law. Legislative attention has been called to the necessities of boiler protection by the fact that both Michigan and Ohio have been prolific in boiler explosions in the past few years, and from the fact that, while other elements of danger have in manufacturing establishments been provided for, the boiler room, where the source of greatest peril lies, and in which accidents result in greatest damage, has been almost universally neglected, so far as safety appliances are concerned.

To the reasonable and thoughtful person there is no question as to the value of a low water alarm on a steam boiler, and when it is known that a common-sized boiler, 60x16, of the horizontal tubular style, has, at 90 pounds pressure, a stored-up force of over 2,600 tons pressure, and that this is under the control of a human being who, to say the least, is not infallible. The idea of a low water alarm is not new nor confined to any one type or kind. Some have features that are commendable, while others lack even the essential requirements, although they may seem on the face a very desirable appliance. Searching and intelligent investigation, however, will show the shortcomings of the many that are urged on the credulous steam user. Thoughtful consideration of the subject should convince those who are about to purchase or those who have them on trial that certain requirements are necessary in low water alarms the same as other things for practical use. It may be admitted that low water in a boiler threatens the safety of all around it and that it is a very undesirable condition from the standpoint of expense and repairs, and this should appeal to those who are responsible for results arising from non-protection as well as those who may be in or near the boiler room whose personal safety is jeopardized.

While it is true that low water is not the cause of all boiler explosions, it will be admitted that at least 50 per cent of the explosions is due to this cause, and even from a humane standpoint, no steam user should object to equipping his plant with a safeguard which will remove one-half of the chances for accident.

The new laws have many adherents and have made many converts to the use of low water alarms; they have also many opponents who have advanced objections, the fallacy of which clearly show a lack of close reasoning and thinking.

A common objection, "With a low water alarm the fireman will wait for the whistle to blow and will become careless." Answer—He might if his wages would be increased every time the whistle blew, or if unstinted praise were bestowed on him when he negligently or deliberately let the water get low enough to sound the alarm. But such is not the case. The sounding of the alarm, showing inattention, should be followed by an investigation and a proper reprimand, with the result that firemen, knowing that the consequences of neglect will be reported, will be *more* careful with the alarm than without it.

Another objection: "It makes more work for my fireman." No, not if the right appliance is used. The necessary operation of trying the water also tries the alarm.

Another says, "I don't need them; my fireman can carry the water steady without them." This is the argument of a man who objects to a fire escape on the ground that he has never had a fire and that his employees are so careful that it would be impossible that a fire should occur. Moreover, a low water alarm is not to carry the water by, but to give warning of coming danger both to those in authority and to those whose duties may require them to be dangerous near the boiler.

To select a low water alarm intelligently requires a knowledge of what is required and to know the conditions under which the alarm must work. The objection to complying with an arbitrary order often blinds the eyes of a steam user to his own best interests, and without thinking that thousands of the best informed people have anticipated the law and equipped their plants with these safeguards solely on account of the actual benefits arising from their use; he jumps at the conclusion that he is being imposed upon and decides that he will buy the cheapest thing that will pass muster. Right here is where a great responsibility rests upon those whose sanction of various safeguards carries with it a weight that influences the decision of the buyer, and it is obvious that rigid investigation of the actual merits and efficiency of any safeguard presented for approval should be made before it is endorsed as filling the requirements of the law. In looking over the list of low water alarms approved in the State of Michigan and also in the state of Ohio, there seems to be a suggestion at least of a lack of knowledge of steam appliances and the conditions under which they have to work. There are many lines of inventions of which a complete list would fill a small volume, and this is true of low water alarms. Owing to the fact that theory too often does not go hand in hand with practice, the majority of devices invented as low water alarms, perhaps I am safe in saying 99 per cent, are familiar only to the careful reader of patent office records. It is a fact that few devices have weathered the ordeal of prolonged and practical use.

Referring to the general type of low water alarm devices, there are:

The float inside of boiler shell.

The electrical appliance.

The expansion tube arrangement.

The safety column alarm.

A brief comment on these different types will give an idea of the lack of requirements in most of them:

"The float inside of boiler" has a valve on top or inside of the shell connected with a whistle on the outside, the valve being operated by a lever with the float on its end. The theory is that when the water gets low, the float lowers, pulls open the valve and the steam blows the whistle. This looks reasonable, but when the question is asked: How am I to know it is operated? How can it be tested? the fact is revealed that it cannot easily be tested, that it is expensive to test it properly and that the only real test, viz., stopping the pump and letting the water get actually low, invites disaster, and that heat must be wasted sufficient to raise from 100 to 200 gallons of water to the steam point.

It will be asked if it is necessary to try the alarm often. No one will deny that everything connected with the boiler should be easily accessible to test at any time and at any moment, and this with the least loss or strain to the boiler. Furthermore, any arrangement on the inside of the boiler is subject to the incrustation that accumulates quicker in the boiler than anywhere else. With the float and lever subject to this incrustation, they will sooner or later become inoperative and then comes the difficulty of repairs and readjustment, the cooling down of the boiler and opening up of the manhole being necessary. Should perchance the water be pure in the boiler and incrustation not result, an inside arrangement of any kind is an obstruction to the cleaning of the boiler, and may be put out of order simply by the force of the water from

the hose in washing out the boiler striking against it, the engineer or fireman not being able to see it. Again, the continual ebullition of the water in the boiler soon destroys the usefulness of the inside alarm. This is true of any appliance in fact using a float, where the float rests on the surface of the water. One type of inside arrangement is constructed so that the float can be pressed down, thus opening the valve and blowing the whistle to make a so called test, but that this is no test at all is obvious and does not prove that the alarm works automatically.

The expansion tube alarm is perhaps one of the weakest attempts to give the steam user a reliable safeguard. As its name indicates, it requires temperature to operate it. It is well known that at different pressures in the boiler the temperature varies. An expansion alarm adjusted at 100 pounds pressure, at which the temperature is 338 degrees Fahrenheit, would not be sure of working at 30 or 40 pounds, where the temperature is 300 degrees or less. Furthermore, the expansion type depends on the water running from a tube, which it so often fails to do, that official reports have shown that from 60 to 80 per cent of the expansion devices in operation in certain localities have failed to work when tested. This type has also the same objection, so far as testing is concerned, i. e., it cannot be properly tried except by sacrifice of heat and water and by inviting disaster.

The electrical appliance: This works on the expansion principle in some cases and in some cases depends upon the float, but the adjustment has to be too close for the conditions prevailing in a boiler room. From as good an authority as Thomas A. Edison, we can quote, "Never trust an electrical appliance when you can use a mechanical equivalent." The general objection to all "inside of the boiler" appliances is that holes must be cut in the boiler which depreciates the strength of the shell. It should be the aim of every steam user to have as few holes in his boiler as possible. Many boilers have too many holes in at the best. Do not add to them.

We might mention fusible plugs in this connection, but the intelligent engineer and well informed steam user will so quickly condemn them that it is unlikely that even the most unthinking person will seriously consider their adoption, nor is it probable that the state inspectors will allow them in any way whatever. We are informed that the Michigan authorities have entirely refused to give them consideration.

In considering the low water alarm column we find that it has every advantage possessed by other types and many other advantages, and that it possesses none of the defects. There are many styles of this type and the steam user has plenty to select from. Some may be better than others. It is not our intention to name those which perhaps possess superior points of excellence or which have been on the market longest and give the most general satisfaction. While the Michigan low water alarm law does not distinctly state that a low alarm column has to be used, yet it is probable that if you ask the various inspectors whose duties call them into contact with plants equipped, which general type of alarm they consider most reliable and which give the best satisfaction, the answer would be, "The low alarm column." The Ohio law plainly specifies that a low water alarm column shall be used and the notices to steam users so read. The alarm column is of ample size and can be attached to the steam openings used by the old column or by enlarging the water glass openings. The fact that the water outside in the column is cooler and that the solids in suspension settle and can be easily blown out is an advantage.

The points of advantage of the alarm column over all others are: Every time the water is tried the alarm is tested—the same operation does it.

The sediment is blown out when the column is tried.

It can be tested any minute of the day and almost instantly—a few seconds only being required.

Very little water is wasted—not more than a quart or so.

The condition of the alarm column is always known, for even if the water pipes running to the boiler become stopped up, it is shown by the whistle blowing longer than usual—the water raising slowly in the column.

Of course the alarm column, the same as any other appliance, must be well made mechanically and must be constructed on correct principles. Careless workmanship or inattention to details will not do on any appliance of the importance of a low water alarm column.

There are many alarm columns for the steam user to select from, some perhaps better than others, but I can only say in a general way to the steam user to select those of a known reputation, those that have been on the market long, which have proven their merits, and those manufactured by responsible houses of known standing. Columns having floats which do not raise and fall with the water in the column are

preferable to those in which the floats rest on the surface of the water, it being obvious that the latter will sooner or later wear themselves out against the side of the column.

The best teacher of the value of the different types of alarms is experience, and in selecting alarms that have been in use for years one is availing himself of the experience of others, which, to the reasonable man, is not objectionable.

I may conclude this paper by saying that nearly all steam users who have thoughtfully considered the matter, declare themselves in favor of the law, and assert their willingness to meet its requirements, and admits that the law water alarm law is one of the many wise provisions for safety to human life and property which different state legislatures have enacted.

APPENDIX

STATE FACTORY INSPECTION

1900

DEPUTY INSPECTORS' REPORTS

REVIEW OF THE WORK

INDUSTRIAL AND LABOR STATISTICS

CONNECTED WITH

STATE FACTORY INSPECTION

COMPARISON OF ACCIDENTS

SUMMARY OF THE WORK

FIRST DISTRICT,

COMPRISING THE CITY OF DETROIT.

HENRY J. EIKHOFF,

Deputy Inspector.

REPORT OF WORK IN THE FIRST DISTRICT.

OFFICE OF DEPUTY FACTORY INSPECTOR, }
Detroit, Michigan, December 1, 1900.

Hon. Joseph L. Cox,

Commissioner of Labor and Chief Factory Inspector, Lansing, Mich.:

DEAR SIR—I have just completed the work of inspection and revisits of factories in the first district, comprising the city of Detroit, for the year 1900, and I herewith submit my report as Factory Inspector.

There have been inspected during the past year 1,588 factories; have also made 400 revisits, of which 10 factories were idle, and the majority of these 10 factories were closed by the trusts of which they were a part. Less trouble was encountered than formerly in enforcing the laws, as the employers considered it very essential to comply with the inspector's orders. The employers are beginning to understand that the protection of machinery and dangerous places about the workshop means less accidents and less litigation and a more reasonable rate of insurance on their employes and elevators, as well as boilers. Notwithstanding the large increase of machinery in every factory and the replacing of old machinery, with new and of the latest pattern, accidents are becoming less every year, but at present the force is insufficient because the factories can be inspected but once each year. If all the large factories using machinery could be inspected at least once a month there would be very few accidents, if any.

SECTION 2—RELATING TO CHILD LABOR.

Many violations of this section have come to my notice, caused by the change of foremen in factories; the new foreman not being familiar with the law, or careless, failed to get sworn statements from the children before they employ them, and as a result some children under 14 years of age have been found employed in the factories. But as soon as I called the attention of their employers to the violation of the law, they at once discharged those under 14 and compelled the other children in their employ to get sworn statements. Many children worked months without having certificates on file showing that they were past 14 years of age and that they can read and write. Their employers in many cases being too busy to attend to the matter themselves must trust entirely to their foreman in these matters. I have also discovered that the Polish schools in this city do not give the children an English education, consequently many of them are unable to read and write the English language, although able to do so in their own language, and under the present law we are compelled to grant

them certificates the same as the other children who can read and write the English language.

SECTION 3.

A number of children were taken away from dangerous machinery and all of my orders complied with.

SECTION 4—HEALTH OF CHILDREN.

I have not found any violations of this section and no complaints have been filed.

SECTION 5—RELATING TO HOISTING SHAFTS AND WELL-HOLES.

This section has been generally complied with. The only trouble we find is that the automatic gates get out of order, but the falling down elevator shafts in factories is a thing of the past.

SECTION 6—RELATING TO FIRE ESCAPES.

We have given a number of orders for the erection or repair of fire escapes, and better means of exit have been ordered so that stairways on the roofs of buildings might be reached in case of fire.

SECTION 7—RELATING TO STAIRWAYS.

There have been a few violations of this section and all orders were complied with, but many places are using ladders instead of stairways as the former require less floor space, but the danger of descending and ascending is thereby increased.

SECTION 8—RELATING TO SHIFTERS FOR BELTS AND OTHER SAFEGUARDS.

Many orders have been given to comply with this section because of the continuous addition of new machinery that requires protection. Factories using machinery should be visited oftener but with the present force each factory can be inspected but once each year.

SECTION 9—RELATING TO EXHAUST FANS.

I have had very little trouble with the enforcement of this section and I have received but one complaint during the past year.

SECTION 10—RELATING TO WASH AND DRESSING ROOMS AND WATERCLOSETS.

This section so far as waterclosets are concerned has been complied with, but as that part of the section relating to wash and dressing rooms is so indefinite that any room having water is considered a wash room for the employees, because they have the privilege of washing and dressing themselves there with the conveniences at hand.

SECTION 11—RELATING TO DINNER HOUR.

The employers as a rule comply with this section, but the employees do not, and when working piece work they in many cases do not take over 10 or 15 minutes for lunch.

ACT 202, PUBLIC ACTS OF 1899—RELATING TO FANS AND BLOWERS.

Where exhaust fans were required the suction of air was sufficient to take away the dust and I was not obliged to apply the test.

ACT 209, PUBLIC ACTS OF 1899—RELATING TO ALARMS ON STEAM BOILERS.

There has been for many years a city law requiring alarms on steam boilers and about 80 per cent of the boilers have alarms attached to them, but some of the alarms are in such shape that the water in the boiler must be removed before they can be tested. I have also found many alarms out of condition because of the carelessness of the man in charge of the boiler, and in some cases it seemed to me that he wilfully adjusted the alarm in such a manner that the device would not respond when the water reached the danger point in the boiler, hoping thereby to conceal a negligence on his part.

SECTION 19—RELATING TO SO CALLED SWEATSHOPS.

The enforcement of this section of the law was turned over to a special inspector who will make a full report.

RECOMMENDATIONS.

Section 17, relating to the penalty for violation of this act should be amended so that any person removing safeguards to machinery should be held responsible, and any foreman employing a child under 14 years of age, or one that has no certificate, or retaining any such child in their employ should be held responsible.

Act 209, Public Acts of 1899, should be amended so as to hold the man in charge of steam boilers responsible if the alarms are out of condition, or not in working order. He should not be required to perform any other labor while the boilers are in use but to attend to the boilers.

The factory act should be amended so as to provide for proper ventilation in factories upon the order of the factory inspector.

I would also recommend that certain sections of the factory law should be amended as follows:

Section 2, relating to the age of children employed, should be amended so that a child shall not receive a certificate to work unless he or she can read and write the English language.

Section 7, relating to stairways, should be amended so that the factory inspector may order proper stairways instead of ladders.

Section 9, relating to exhaust fans, should be amended so that exhaust fans may be provided, upon the order of the factory inspector, to carry away noxious odors and smoke.

Section 10, relating to wash rooms, should be amended so as to designate what a wash room should consist of.

Section 14 should be amended so that canning factories in cities should not be exempt from this section.

The factory act should be amended so that the temperature in factories should be defined, fixing the maximum and minimum temperature in the discretion of the factory inspector.

Respectfully yours,

HENRY J. EIKHOFF,

Deputy Inspector.

Inspection Book No. 1.

Inspection District No. 1.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1	C. H. Dickerson	Detroit....	Hats, etc	5	2	9	24	12	\$1 45	Hand	....
2	Traub Bros.....	"	Jewelry	6	6	10	24	12	2 50	"	....
3	McNamara & Mamer.....	"	Signs.....	9	6	9	24	12	3 00	"	....
4	A. Schlesinger & Co.....	"	Clothing	10	6	9	26	11	1 00	Elec.	....
5	Schultz Sign Co.....	"	Signs.....	6	2	8	26	12	3 00	Hand	....
6	Martin, Maier & Co.....	"	Trunks, etc.....	21	21	10	26	12	1 57	Elec.	....
7	New York Candy Mfg. Co.....	"	Candies	10	6	10	26	12	1 00	"	....
8	Tuttle & Clark.....	"	Harnesses.....	35	20	10	26	12	1 87	Gas.	....
9	H. M. Hall.....	"	Signs.....	6	2	9	26	11	1 50	Hand	....
10	E. Schloss & Co.....	"	Clothing	35	35	10	26	12	1 00	Elec.	....
11	Detroit Cap Mfg. Co.....	"	Cloth caps	50	50	10	26	12	"	"	....
12	Nonpareil Shirt Co.....	"	Clothing	20	20	9	26	12	90	"	....
13	Detroit Cloak Co.....	"	Cloaks.....	12	7	9	26	12	86	"	....
14	A. Jacobs & Co.....	"	Clothing	75	50	10	26	12	1 00	E & S	Yes
15	The Thorp Mfg. Co.....	"	Seals, etc.....	8	5	9	26	12	2 60	Elec.	....
16	M. N. Rowley & Co.....	"	Scales.....	6	6	10	26	12	2 33	"	....
17	McIntosh, Crane & Co.....	"	Candies	20	20	7	26	12	90	"	....
18	Heavenrich Bros.....	"	Clothing	20	20	9	26	12	1 75	"	....
19	Monroe Rosenfield Co.....	"	"	4	4	10	26	12	1 50	Hand	....
20	Schloss Bros.....	"	"	18	18	9	26	12	1 15	Elec.	....
21	Det. Brass and Iron Nov. Co.....	"	Novelties.....	18	18	10	26	12	1 39	Gas.	....
22	The T. W. Noble Co.....	"	Tents, etc.....	30	20	9	26	12	1 75	Elec.	....
23	J. T. Wing.....	"	Belting, etc.....	30	30	9	26	12	1 67	Gas.	....
24	The Detroit Vapor Stove Co.....	"	Stoves.....	20	20	10	26	10	1 00	"	....
25	Meier & Schuknecht.....	"	Trunks, etc.....	70	70	10	26	12	1 30	Rent.	....
26	W. E. Nageborn.....	"	Machinery	5	5	10	26	12	1 80	St'm.	Yes
27	Wm. Graham Printing Co.....	"	Printing.....	40	25	9	26	12	1 80	Elec.	....
28	Ouellette & Stevenson Cigar Co.....	"	Cigars.....	50	35	7	26	12	1 14	Hand	....
29	Chas. Goldsmith.....	"	Clothing	200	49	10	24	12	92	Elec.	....
30	S. Goldstein & Co.....	"	"	21	21	10	26	12	1 00	"	....
31	Mich. Elec. & Stereo. Foundry.....	"	Electrot'pes etc.....	10	10	9	26	12	1 50	"	....
32	Kurtz Paper Box Co.....	"	Paper boxes.....	50	50	9	26	12	70	St'm.	No
33	Safety Furnace Pipe Co.....	"	Pipe.....	18	7	9	26	12	1 50	Hand	....
34	Farrand, Williams & Clark.....	"	Drugs.....	70	70	9	26	12	1 79	St'm.	Yes
35	Howe Mfg. Co.....	"	Envelopes.....	11	11	8	26	12	1 00	Elec.	....
36	Curtis, Mulford Co.....	"	Printing.....	20	20	9	26	12	1 50	"	....
37	National Blacult Co.....	"	Crackers, etc.....	65	50	9	26	12	1 34	St'm.	Yes
38	Hemmeter Cigar Co.....	"	Cigars.....	178	178	8	26	12	1 03	Elec.	....
39	Detroit Ideal Paint Co.....	"	Paints.....	4	4	10	26	12	1 25	"	....
40	J. F. Balsch.....	"	Cutlery.....	3	3	10	26	12	3 00	"	....
41	Gray, Toynton & Fox.....	"	Candies.....	250	150	9	26	12	1 00	St'm.	Yes
42	Bagley & Co.....	"	Tobacco.....	160	160	8	26	12	88	"	No
43	J. T. Wing & Co.....	"	Rabbitt metal.....	3	3	9	26	12	2 00	"	....
44	Henry B. Lewis.....	"	Ironwork.....	75	20	9	26	12	2 00	Elec.	....
45	Geo. W. Cope.....	"	Patterns.....	80	53	10	26	12	1 89	St'm.	No
46	Michigan Electric Co.....	"	Elec. goods.....	40	40	9	26	12	2 00	Elec.	....
47	Gourlay Bros.....	"	Dressmaking.....	18	18	9	26	12	1 50	"	....
48	Gourlay Bros.....	"	Laundry.....	12	12	9	26	14	1 00	"	....
49	John S. Spiegel Co.....	"	Shirts.....	35	34	8	26	10	1 00	"	....
50	Gourlay Bros.....	"	"	15	15	9	26	12	1 00	"	....

* Not given.

Inspection Book No. 2.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
51	L. O. Skinkle.....	Detroit.....	Cigars.....	10	10	8	26	12	\$1 00	Hand	.....
52	H. Dunnebeck.....	".....	Harnesses.....	3	2	10	26	12	2 00	"	.....
53	DeSteiger, Fallon Co.....	".....	Furs.....	40	13	9	26	12	1 80	Elec.	.....
54	Commercial Milling Co.....	".....	Flour, etc.....	60	60	*24	26	12	1 25	St'm.	.....
55	G. Berger's Cigar Mfg. Co.....	".....	Cigars.....	15	14	8	26	12	1 43	Hand	.....
56	Detroit Lithograph Co.....	".....	Lithographs.....	30	20	9	26	12	2 00	Rent.	.....
57	Fallister Bros.....	".....	Saws.....	3	3	10	26	12	2 00	Gas.	.....
58	J. C. Gross & Co.....	".....	Sails, etc.....	60	30	10	26	12	1 67	Elec.	.....
59	Public Lighting Commission.....	".....	Electricity.....	80	80	*24	30	12	2 13	St'm.	Yes
60	E. N. Lightner & Co.....	".....	Perfumes.....	20	20	9	26	12	1 50	"	.....
61	Schardt & Mathewson.....	".....	Feathers.....	15	11	10	26	12	1 32	"	.....
62	National Biscuit Co.....	".....	Baked goods.....	35	26	8	26	12	1 35	"	.....
63	Hovey's Confectionery.....	".....	Candies.....	3	3	8	26	12	1 50	Elec.	.....
64	Detroit Picture Frame Factory.....	".....	Frames.....	4	3	10	20	12	1 33	Hand	.....
65	F. Merriott.....	".....	Iron work.....	10	5	10	26	12	1 40	"	.....
66	Edwin S. George.....	".....	Furs.....	37	16	9	26	12	1 88	Elec.	.....
67	F. W. Stickel & Bro.....	".....	Clothing.....	4	4	10	26	12	2 50	Hand	.....
68	W. T. McCreary.....	".....	Cigars.....	18	14	8	26	12	1 78	"	.....
69	Christiansen Harness Mfg Co.....	".....	Harnesses.....	24	24	10	26	12	1 58	Elec.	.....
70	Russell Wheel & Foundry Co.....	".....	Castings, etc.....	250	250	10	26	12	1 20	St'm.	No
71	Mrs. W. B. Hibbard Home Bakery	".....	Baked goods.....	8	8	10	26	12	2 00	Hand	.....
72	J. W. Ehrman.....	".....	Shirt waists.....	6	6	9	26	1	1 16	Gas.	.....
73	Arthur S. Fetters.....	".....	Printing.....	5	4	9	26	12	2 25	Elec.	.....
74	J. A. Tapping.....	".....	".....	10	10	9	26	12	2 20	"	.....
75	Handford Printing Co.....	".....	".....	7	3	9	26	12	2 33	St'm.	No
76	The Clark & Reardon Printing Co	".....	".....	5	2	9	26	12	2 40	Elec.	.....
77	H. M. Kettle & Co.....	".....	Trunks, etc.....	4	4	10	26	12	1 50	Hand	.....
78	Blumenthal & Immerman.....	".....	Pants, etc.....	36	36	9	26	12	97	Elec.	.....
79	Detroit Cigar Mfg. Co.....	".....	Cigars.....	80	65	8	26	12	1 54	Hand	.....
80	Schober Printing & Station'y Co.	".....	Printing, etc.....	30	30	9	26	12	1 33	"	.....
81	Codde Bros.....	".....	Cloth clean.....	2	2	10	26	12	2 00	"	.....
82	Raynor & Taylor.....	".....	Printing.....	40	40	9	26	12	1 67	Gas.	.....
83	Wm. Rudedale.....	".....	Carving.....	5	2	9	26	12	3 00	Hand	.....
84	John Boruman & Son.....	".....	Printing.....	77	77	9	26	12	1 30	"	.....
85	Williams, Davis, Brooks & Hinchman Sons.....	".....	Medicine.....	80	40	9	24	12	1 25	St'm.	No
86	A. Kuhlman & Co.....	".....	Surgeons inst.....	7	7	10	26	12	2 00	Elec.	.....
87	J. Pospeshill.....	".....	Wagons.....	4	4	10	26	12	2 00	Hand	.....
88	W. C. Barbour & Co.....	".....	Neckwear.....	30	23	9	26	12	87	Elec.	.....
89	Otto Liebold.....	".....	Carving.....	3	2	9	26	12	3 00	Hand	.....
90	The Peerless Mfg. Co.....	".....	Clothing.....	115	115	9	26	12	87	Elec.	.....
91	Banner Cigar Mfg Co.....	".....	Cigars.....	300	200	8	26	12	1 00	Hand	.....
92	G. R. Goss & Son.....	".....	".....	60	20	8	26	12	1 25	"	.....
93	Wm. T. Simpson.....	".....	Artifi'l limbs.....	4	4	10	26	12	3 50	"	.....
94	S. Rigby.....	".....	Enameling.....	12	3	9	26	12	2 33	"	.....
95	Morgan & Wright.....	".....	Repairs.....	6	3	10	26	12	1 67	"	.....
96	L. R. Ruhl.....	".....	Baked goods.....	6	6	8	26	12	2 00	"	.....
97	May & Co.....	".....	Signs.....	7	3	10	26	12	3 00	"	.....
98	Wm. A. Friedrich.....	".....	Printing.....	2	2	9	26	12	2 00	"	.....
99	Conrad Etter.....	".....	Clothing.....	5	5	10	26	12	1 80	"	.....
100	Rente & Toepfer.....	".....	".....	3	3	10	26	12	2 00	"	.....

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 3.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?	
101	G. V. Nelson.....	Detroit.....	Clothing.....	2	2	10	26 12	1	\$2 00	None	....
102	Albert Nelson.....	"	"	6	6	10	26 12	1	66	"	....
103	H. Hanshaw.....	"	Signs.....	7	4	10	26 12	3	00	"	....
104	Art Glass Co.....	"	Art glass.....	5	5	10	26 12	2	00	"	....
105	Fred Breitenbecher.....	"	Clothing.....	4	4	10	26 12	1	75	"	....
106	James Sieger.....	"	"	5	3	10	26 12	1	67	"	....
107	Basemann & Winkler.....	"	"	4	4	10	26 12	1	75	"	....
108	H. Dittrich.....	"	"	6	5	10	26 12	1	60	"	....
109	John Bissitt.....	"	"	5	5	10	26 12	1	80	"	....
110	L. P. Ganger.....	"	Printing.....	2	2	10	26 12	1	50	"	....
111	John C. Sullivan & Son.....	"	Cigars.....	35	35	8	26 12	1	71	"	....
112	Reinhold Machine Co.....	"	Machinery.....	24	16	10	26 12	1	89	"	....
113	Ralston-Stroup Printing Co.....	"	Printing.....	7	7	9 1/2	26 12	1	50	Elec.	....
114	The Educational Specialty Co.....	"	File cases.....	4	4	9	26 12	1	75	Hand	....
115	Carkeek Printing Co.....	"	Printing.....	4	4	9	26 12	1	50	Elec.	....
116	C. B. Seitz & Son.....	"	Wood turn.....	7	7	10	26 12	1	72	Rent.	....
117	R. H. Stender.....	"	Cigars.....	10	8	8	26 12	1	50	None	....
118	Michigan Cigar Box Co.....	"	Boxes.....	60	60	10	26 12	80	St'm.	No	....
119	Morrison Printing Co.....	"	Printing.....	18	18	9	26 12	1	67	Rent.	....
120	The Henry A. Newland Co.....	"	Umbrellas.....	80	80	9	26 12	1	00	"	....
121	Bennett Rubber Stamp Co.....	"	Stamps.....	4	4	10	26 12	1	62	None	....
122	E. W. Alexander.....	"	Umbrellas.....	7	4	9	26 12	1	50	"	....
123	De Croupet Iron Co.....	"	Iron work.....	8	8	9 1/2	2 12	1	75	Gas.	....
124	The Angelus.....	"	Newspapers, etc.....	12	12	8 1/2	26 12	1	12	Elec.	....
125	Detroit Trimmed Hat Co.....	"	Hats.....	50	12	8	26	8	1	50	None
126	The Improved Printing Co.....	"	Printing.....	5	5	9	26 12	2	00	Elec.	....
127	Frank Ruhl.....	"	Baked goods.....	8	8	10	26 12	1	75	None	....
128	G. Bischof & Co.....	"	Cigars.....	6	4	8	26 12	1	25	"	....
129	J. Malder.....	"	Clothing.....	4	3	10	26 12	1	67	"	....
130	Cabinet Cigar Co.....	"	Cigars.....	50	10	8	26 12	1	80	"	....
131	Maeba-Walsh Co.....	"	"	85	85	9	26 12	1	22	"	....
132	Albert Gerlach.....	"	Baked goods.....	3	2	9	26 12	2	00	"	....
133	Western Calum Light Works.....	"	Light, etc.....	3	2	10	20	8	1	50	"
134	Boydell Bros.....	"	Paint.....	60	60	10	26 12	1	67	St'm.	No
135	Electric Service & Appliance Co.....	"	Electric goods.....	5	5	9	26	1	2	00	None
136	Mrs. R. Robinson.....	"	Dresses.....	7	2	9	26 12	1	00	"	....
137	Edward F. Fee.....	"	Glass.....	12	12	10	26 12	1	16	Rent.	....
138	P. S. Odea.....	"	Shoe uppers.....	6	3	9	26 12	1	67	Elec.	....
139	Lagora, Fee Co.....	"	Cigars.....	80	80	7 1/2	24 12	1	00	None	....
140	T. Greiner.....	"	Iron work.....	5	2	9	12 12	2	00	"	....
141	John F. Kilroy.....	"	Printing.....	5	4	9	26 12	2	00	Gas.	....
142	Eagle Paper Box Co.....	"	Boxes.....	35	23	10	26 12	1	70	St'm.	Yes
143	C. H. Muckenhirn.....	"	Plumbing.....	36	22	10	26 12	1	81	Gas.	....
144	Detroit Electric Plating Co.....	"	Electro plating.....	20	14	10	26 12	1	80	St'm.	Yes
145	Fred Bamford & Co.....	"	Painting.....	50	20	9	26 12	1	75	None	....
146	E. Marks Co.....	"	Cigars.....	7	7	8	26 12	1	72	"	....
147	John E. Doherty.....	"	"	30	23	8	26 12	1	97	"	....
148	John H. Schwegl.....	"	Jewelry.....	6	3	9	26 12	2	17	Elec.	....
149	Macaulay & Co.....	"	Hats.....	26	8	9	26 12	1	50	None	
150	George O. Williams.....	"	Printing.....	2	2	9	26 12	1	50	"	

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Inspection Book No. 4.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
151	Standard Computing Scale Co.	Detroit.	Scales	11	11	10	26	10	\$1 82	Rent.	....
152	Max J. Rosenberg.	"	Printing.	8	8	9	26	12	1 63	"	....
153	Frank H. West.	"	"	11	10	9	26	12	1 50	Elec.	....
154	Jos. N. Smith & Co.	"	Trimmings.	60	55	10	26	12	1 77	St'm.	Yes
155	Speaker Printing Co.	"	Printing, etc.	14	14	9	26	12	1 75	"	....
156	Detroit Rack Co.	"	Metal furn.	10	7	9	26	1	1 72	Elec.	....
157	Old Sol Cigar Co.	"	Cigars	8	8	8	26	12	1 50	None	....
158	Osborn Cash Register Co., Ltd.	"	Registers.	40	35	10	26	12	1 13	Rent.	....
159	Chicago Hosiery Co.	"	Knit goods.	25	23	9	26	12	87	"	....
160	Hay & Todd	"	Underwear	80	75	9	26	8	73	"	....
161	Globe Tobacco Co.	"	Tobacco	260	260	9	26	12	96	St'm.	Yes
162	Phillips' Show Case Co.	"	Show cases.	53	53	10	26	12	1 23	"	No
163	Louis J. Wohnlich	"	Machinery	3	3	9	26	12	2 00	"	....
164	Walter Beckwith	"	Blacksmith'g.	3	3	9	26	12	2 33	None	....
165	H. Ridigar.	"	Clothing	3	3	10	26	12	2 00	"	....
166	The Thos. Smith Press	"	Printing	10	8	9	26	12	1 75	Rent.	....
167	A. Neubroner.	"	Wagon rep.	4	3	10	26	12	2 33	None	....
168	C. Eisenhardt.	"	Photographs.	5	5	8	26	12	1 80	"	....
169	Progressive Knitting Mills.	"	Knit goods.	150	130	10	26	12	77	Rent.	....
170	W. P. Holliday.	"	Boxes	350	225	10	26	12	89	St'm.	No
171	W. W. Watson.	"	Specialties	20	20	10	26	12	1 75	Gas.	....
172	The Oscillating Truss Co.	"	Trusses	2	2	10	26	12	1 50	"	....
173	Jos. Petty.	"	Blacksmith'g.	3	2	9	26	12	2 50	None	....
174	Pudrith & Chandler.	"	Roofing	20	8	9	16	12	2 00	"	....
175	C. Lamhert.	"	Repairs.	3	2	10	26	12	1 50	"	....
176	Allen Bros.	"	Frames	4	3	10	26	12	1 67	"	....
177	Henry C. Hoffman.	"	Repairs.	3	2	10	26	12	1 50	"	....
178	Venetian Marble Mosaic Art Co.	"	Mosaics	30	25	9	26	12	2 48	"	....
179	Columbia Buggy Co.	"	Buggies	15	12	10	26	12	2 08	"	....
180	Chas. Armitage.	"	Blacksmith'g.	6	3	9	26	12	2 33	"	....
181	W. J. White & Co.	"	Signs	25	25	9	26	12	1 20	"	....
182	Courier Printing Co.	"	Printing.	2	2	9	26	12	1 25	Rent.	....
183	Thos. H. Abbott.	"	"	2	2	9	26	12	1 50	"	....
184	The Bookkeeper Co.	"	Adding mach.	5	4	10	26	12	1 75	"	....
185	Eby & Mathews	"	Printing.	10	9	9	26	12	1 00	St'm.	Yes
186	Laing Planetarium.	"	School sup.	4	2	9	26	12	2 50	None	....
187	C. M. Rousseau & Sons.	"	Printing.	12	8	9	26	12	1 75	Rent.	....
188	James Markey.	"	"	3	3	9	26	12	2 00	"	....
189	James J. Etzel.	"	Pants.	10	10	9	26	10	50	"	....
190	James J. Etzel.	"	Vests, etc.	25	25	9	26	12	1 00	"	....
191	Cliff & Higgins.	"	Binding	18	16	9	26	12	1 00	"	....
192	Wm. F. Moore.	"	Printing.	2	2	9	26	12	2 50	"	....
193	Detroit Alaska Knitting Mills.	"	Knit goods.	60	60	9	26	12	83	S & E	No
194	Wm. Deuter.	"	Clothing rep.	3	3	10	26	12	1 00	None	....
195	The Schulenburg Mfg. Co.	"	Billiard tables	8	8	10	26	12	1 50	"	....
196	L. C. Brossy Dying Co.	"	Dyed goods	25	20	10	26	12	1 25	St'm.	Yes
197	J. H. Harrington.	"	Cigars	15	13	8	26	12	1 54	None	....
198	Michigan Steam Laundry.	"	Laundry	60	30	10	26	12	1 00	St'm.	Yes
199	E. Chope & Sons	"	Wagons	18	13	10	26	12	1 54	"	No
200	E. S. Sumers.	"	Extracts	5	5	9	26	12	1 40	Elec.	....

Inspection Book No. 5.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
201	Geo. N. Huff	Detroit.....	Poultry	5	4	10	26 12	1 50	None	....
202	M. O. Cross & Co.....	"	Brass work...	6	4	9½	26 12	2 00	Gas..	....
203	N. White	"	Blacksmith'g.	3	2	8	26 12	2 25	None	....
204	Pharmacists Cigar Co.....	"	Cigars.....	12	6	8	26 12	1 50	"	....
205	Northern Cigar Mfg. Co.....	"	"	22	19	8	26 12	1 58	"	....
206	Det. Elec. Light & Power Co.....	"	Electricity....	20	20	*24	30 12	2 50	St'm.	Yes	
207	Whitehead & Kales Iron Works.	"	Iron work....	25	20	9	26 12	2 00	Elec..	....
208	Isaac Applebaum	"	Scrap iron....	15	5	10	26 12	1 40	None	....
209	C. R. Wilson Carriage Co.....	"	Carriages.....	25	25	10	26 12	1 60	St'm.	Yes	
210	H. Deitz	"	Cigars.....	18	18	6½	26 12	1 39	None	....
211	Math. Schumer.....	"	Cloth repairs.	4	4	10	26 12	1 50	"	....
212	D. M. Ferry & Co.....	"	Seeds, etc.....	900	560	10	26 12	1 30	S & E	Yes	
213	Vinton Company.....	"	Woodwork.....	250	250	8	26 12	2 00	St'm.	"	
214	H. Sherer & Co.....	"	Trimmings....	60	60	10	26 12	1 30	Gas..	....
215	Thos. Tippling	"	Blacksmith'g.	3	2	9	26 12	2 50	None	....
216	Fulton Iron & Engine Works	"	Machinery....	120	120	10	26 12	1 25	St'm.	Yes	
217	Pfaudler Vacuum Form Co.....	"	Glazed vats....	40	40	10	26 12	1 62	"	No	
218	Detroit Safe Co.....	"	Safes, etc.....	40	30	10	26 12	1 27	"	"	
219	Charles Flach.....	"	Furniture.....	40	2	10	26 12	2 00	None	....
220	J. Michels & Co.....	"	Machinery....	15	15	10	26 12	1 67	St'm.	No	
221	Hayes File Co.....	"	Files.....	12	12	10	26 12	1 42	Rent.	....
222	Mich. Electro Plating Works.....	"	Plating.....	6	5	10	26 12	1 60	"	....
223	Star Brass Co.....	"	Castings.....	4	4	10	26 12	1 75	None	....
224	Traugott Schmidt & Sons.....	"	Tanning.....	115	115	10	26 12	1 30	St'm.	Yes	
225	E. T. Barnum Wire & Iron Wrks.	"	Iron work....	10	10	10	26 12	1 50	Gas..	....
226	Phoenix Wire & Iron Works.....	"	Wire cloth....	47	47	10	26 12	1 56	"	....
227	S. Adelson	"	Dresses.....	5	3	9	26 12	1 00	None	....
228	Thent & Hasse	"	Signs.....	4	2	10	26 12	3 00	"	....
229	Detroit Cornice & Slate Co.....	"	Cornices.....	25	13	9	26 12	1 78	"	....
230	The Grand Laundry	"	Laundry.....	140	140	8½	26 12	71	Rent.	....
231	W. J. Kohlhaas & Co.....	"	Woodwork....	7	7	10	26 12	1 43	"	....
232	Peninsular Saw Co.....	"	Saws.....	6	5	9½	26 12	2 00	St'm.	No	
233	Burr's Damascus Tool Works.....	"	Tools.....	8	8	9½	26 12	2 00	Rent.	....
234	Hart & Co.....	"	Hardware.....	60	60	10	26 12	83	St'm.	No	
235	Sievers & Erdman.....	"	Carriages.....	80	80	10	26 12	1 70	"	....
236	Detroit Cotton Batting Co.....	"	Cotton bat....	10	10	10	26 12	1 50	Gas..	....
237	D. E. Rice & Co.....	"	Machinery....	4	4	8	26 12	2 00	St'm.	Yes	
238	Wolverine Casket Works	"	Caskets.....	8	8	10	26 12	2 00	Gas..	....
239	Citizens St. Ry. Repair Dept.....	"	Street cars....	10	6	10	26 12	2 00	Elec..	....
240	J. P. Hensien Co.....	"	Cans, etc.....	75	60	10	26 12	1 33	Gas..	....
241	The Rumsey Wool Stock Co.....	"	Rags.....	20	10	9½	26 12	80	None	....
242	John Lauer.....	"	Machinery....	33	33	10	26 12	2 57	St'm.	Yes	
243	A. Krollik & Co.....	"	Pants, etc.....	30	30	9	26 12	75	Elec..	....
244	Detroit Screw Works	"	Machin'ry, etc	180	180	10	26 12	1 11	St'm.	No	
245	Geo. F. Doemling & Son.....	"	Furniture.....	14	12	9	26 12	1 67	Rent.	....
246	Detroit Shipbuilding Co.....	"	Brass goods..	135	75	10	26 12	2 13	St'm.	Yes	
247	Robert Hutton & Co.....	"	Roofing, etc..	50	25	9	26 12	2 00	None	....
248	Barie & Saladin.....	"	Bread.....	11	11	9	26 12	2 00	St'm.	Yes	
249	The Rumsey Wool Stock Co.....	"	Rags.....	15	15	9½	26 12	83	None	....
250	Thos. F. Cowley.....	"	Blacksmith'g.	3	3	9	26 12	2 70	"	....

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 6.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled	Number of employees when running full capacity.		Number of employees at time of inspection.	Number hours running per day.	Average number days per month.		Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
251	Strong, Lee & Co.....	Detroit.....	Skirts, etc.....	180	190	94		26	12	\$0 53	St'm.	Yes	
252	Clark Can Co.....	"	Tin cans.....	100	60	10		26	12	1 08	"	"	
253	The Ray Chemical Co.....	"	Chemicals.....	25	25	10		26	12	1 52	"	"	
254	Loyal American Cigar Mfg. Co.....	"	Cigars.....	14	7	8		26	12	1 50	None	"	
255	Armstrong & Graham.....	"	Saddlery.....	150	150	10		26	12	1 70	Rent.	"	
256	Walter Buhl & Co.....	"	Furs.....	50	50	9		26	12	1 74	Elec.	"	
257	Imperial Cap Co.....	"	Caps.....	18	18	94		26	12	1 50	"	"	
258	Marvin M. Stanton.....	"	Pants.....	350	350	9		26	12	1 17	Rent.	"	
259	W. H. Anderson & Son.....	"	Iron work.....	35	35	10		26	12	1 60	St'm.	No	
260	Globe Brass Works.....	"	Brass goods.....	35	35	10		26	12	1 71	"	"	
261	Hallenberg & Liebig.....	"	Repairs.....	4	3	10		26	12	2 00	Rent.	"	
262	Charles Martin.....	"	Specialties.....	54	10	9		26	12	1 80	"	"	
263	W. C. Murdock.....	"	Patterns.....	5	4	10		26	12	2 25	"	"	
264	Murrell & Reardon.....	"	Blacksmith's g.....	4	3	9		26	12	2 66	None	"	
265	N. Hardoin.....	"	Brass work.....	5	5	10		26	12	2 00	Rent.	"	
266	Hunter & Scheuren.....	"	Printing.....	4	4	9		26	12	2 00	"	"	
267	Frank Aldrich.....	"	Specialties.....	5	2	10		26	12	2 00	"	"	
268	C. E. Burch.....	"	Carpentering.....	4	2	10		26	12	2 00	None	"	
269	F. G. Poll.....	"	Photographs.....	4	4	10		30	12	1 50	"	"	
270	Frank Morris.....	"	".....	3	3	10		30	12	1 66	"	"	
271	Christian F. Buhler.....	"	Sausage.....	4	4	10		26	12	1 75	Gas.	"	
272	E. M. Burghardt.....	"	Clothing.....	4	4	10		26	12	2 00	None	"	
273	John P. Lieberman & Co.....	"	Cigars.....	15	15	8		26	12	1 67	"	"	
274	Carl E. Schmidt.....	"	Furs.....	12	8	10		26	12	1 06	Elec.	"	
275	Mrs. W. Merritt.....	"	Dresses.....	5	3	10		26	12	1 33	None	"	
276	Arthur Colton.....	"	Machinery.....	25	20	10		26	12	2 50	Gas.	"	
277	Joseph Grosslight.....	"	Dresses.....	10	7	10		26	12	1 43	None	"	
278	Henry Joe & Co.....	"	Brass, etc.....	8	8	94		26	12	1 50	Rent.	"	
279	Western Newspaper Union.....	"	Printing.....	20	20	94		26	12	1 75	St'm.	No	
280	A. Simon & Co.....	"	Rags.....	20	20	8		22	12	80	None	"	
281	F. Bruesser.....	"	Costumes.....	4	2	10		26	12	1 50	"	"	
282	Herman Spates.....	"	Hats.....	5	3	9		26	12	1 00	"	"	
283	Clark Novelty Mfg. Co.....	"	Sham holders.....	15	6	9		26	12	83	"	"	
284	The Detroit Millinery Co.....	"	Hats.....	6	4	9		26	12	1 25	"	"	
285	Mrs. L. Nairn.....	"	".....	4	3	9		26	12	1 00	"	"	
286	G. W. Rench.....	"	Iron work.....	3	2	10		26	12	2 00	"	"	
287	E. A. Cuney.....	"	".....	3	2	10		26	12	2 00	"	"	
288	Detroit Suspender Mfg. Co.....	"	Suspenders.....	5	6	9		26	12	1 20	"	"	
289	Brede & Schroeter.....	"	Signs.....	10	4	9		26	12	3 00	"	"	
290	John Malcho.....	"	Horse collars.....	9	9	10		26	12	1 67	"	"	
291	Detroit Waste Paper Co.....	"	Sort paper.....	15	13	94		26	12	80	"	"	
292	A. W. Brooks.....	"	Printing.....	4	4	9		26	12	2 00	Elec.	"	
293	G. Dematter.....	"	Repairs.....	4	3	10		26	12	2 00	None	"	
294	Misses Erlenbach.....	"	Hats.....	6	3	10		26	12	2 00	"	"	
295	C. W. Herbst.....	"	Clothing.....	5	4	10		26	12	1 50	"	"	
296	Sunday Herold.....	"	Newsp'rs, etc.....	4	3	9		26	12	3 00	"	"	
297	L. Lootens.....	"	Clothing.....	3	2	10		26	12	2 00	"	"	
298	H. A. Schmoeck.....	"	".....	3	3	10		26	12	3 00	"	"	
299	Schuknecht Book Bindery.....	"	Book binding.....	4	3	10		26	12	1 67	"	"	
300	Adolph Enggass.....	"	Jewelry.....	2	2	10		26	12	2 50	"	"	

* Running 7 days per week.

Inspection Book No. 7.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam is there low water alarm, and is it in good condition?
301	Wm. G. Merbach.....	Detroit.....	Plumbing.....	10	3	9	26	12	\$2 66	None	.....
302	Chas. R. Baker.....	".....	Photographs.....	4	3	10	26	12	1 66	"	.....
303	Baron Photograph Gallery.....	".....	".....	4	3	10	26	12	1 67	"	.....
304	H. Kornrofsky.....	".....	Hats.....	2	2	10	26	12	2 50	"	.....
305	H. Schroeter.....	".....	Models.....	3	2	10	26	12	2 00	"	.....
306	Wilton, Reuther Co.....	".....	Sculpture.....	40	30	9	26	12	1 67	"	.....
307	A. C. Juzek.....	".....	Clothing.....	3	3	10	26	12	2 00	"	.....
308	Quatermass Photo. Gallery.....	".....	Photographs.....	3	3	10	26	12	1 67	"	.....
309	Wm. Peters.....	".....	Shoes.....	10	6	10	26	12	1 50	"	.....
310	H. Jrrrie.....	".....	Photographs.....	3	3	10	26	12	1 67	"	.....
311	F. Brasenberger.....	".....	Candy.....	30	30	10	26	12	1 00	St'm.	Yes
312	Geo. J. Heck.....	".....	Printing.....	4	4	9	26	12	2 00	Elec.	.....
313	M. Tegunsky.....	".....	Wrappers.....	3	3	10	26	12	1 00	None	.....
314	Delta Laundry.....	".....	Laundry.....	20	19	10	26	12	1 00	St'm.	Yes
315	H. Posen.....	".....	Hats.....	4	3	10	26	12	1 00	None	.....
316	G. Haecker.....	".....	Frames.....	2	2	10	26	12	1 50	"	.....
317	Spindler & Son.....	".....	Signs.....	3	2	9	26	12	3 00	"	.....
318	F. Diengerson.....	".....	Upholstering.....	33	33	10	26	12	1 51	"	.....
319	F. Eack.....	".....	Baked goods.....	3	2	9	26	12	2 00	"	.....
320	Ideal Laundry.....	".....	Laundry.....	4	4	10	26	12	1 25	St'm.	No
321	J. Weinberg.....	".....	Clothing.....	3	3	10	26	12	2 33	None	.....
322	S. E. Werner.....	".....	Hats.....	20	11	10	26	12	1 09	"	.....
323	M. Galowsky.....	".....	".....	4	4	9	26	12	1 25	"	.....
324	Mrs. Frankenstein Co.....	".....	".....	7	7	9	26	12	1 00	"	.....
325	Sareson & Starr.....	".....	Knee pants.....	6	6	10	26	12	1 00	"	.....
326	H. D. Plotnik.....	".....	Tinware.....	4	2	10	26	12	1 75	"	.....
327	Detroit Iron and Metal Yard.....	".....	Scrap iron.....	30	10	10	26	12	1 50	"	.....
328	M. Shapelo.....	".....	Sort rags.....	8	8	7	26	12	75	"	.....
329	H. W. Pickel.....	".....	Malt.....	8	8	10	30	12	1 87	St'm.	No
330	Grand Upholstering & Furn. Co.....	".....	Upholstering.....	4	4	10	26	12	2 00	None	.....
331	John Hoffman.....	".....	Clothing.....	4	3	10	26	12	2 67	"	.....
332	Wm. Lindeman.....	".....	Wagons.....	11	11	10	26	12	1 73	"	.....
333	H. Frankinstine.....	".....	Cigars.....	4	4	8	26	12	1 75	"	.....
334	J. Freda & Co.....	".....	Tailoring.....	14	14	10	26	12	1 29	Elec.	.....
335	C. Danto & Co.....	".....	Fish.....	5	4	10	26	12	1 75	None	.....
336	Detroit Stained Glass Works.....	".....	Glass.....	7	7	10	26	12	2 14	"	.....
337	F. D. Brooks.....	".....	Photographs.....	2	2	10	26	12	2 00	"	.....
338	Detroit Picture Co.....	".....	Upholstering.....	5	5	9	26	12	2 00	"	.....
339	Alois Laitner.....	".....	Brushers.....	10	10	10	26	12	80	Gas.....	.....
340	Kramer & Co.....	".....	Printing.....	3	3	8	26	12	2 67	Rent.	.....
341	Michigan Volksblatt.....	".....	Newspa'rs, etc.....	25	25	8	26	12	2 40	St'm.	Yes
342	Vaughan & Tanner.....	".....	Repairs.....	4	3	10	26	12	2 67	None	.....
343	Detroit Mantel and Tile Co.....	".....	Flooring.....	5	3	10	26	12	2 33	"	.....
344	P. Armstrong & Co.....	".....	Roofing.....	5	4	9	26	12	1 75	"	.....
345	Geo. Lenhardt & Co.....	".....	Repairs.....	2	2	10	26	12	2 50	"	.....
346	Crescent Brass and Iron Co.....	".....	Brass work.....	80	80	10	26	12	1 25	G & S	No
347	Northern Engineering Works.....	".....	Machinery.....	75	75	10	26	6	1 56	Gas.....	.....
348	Cartwright Bros.....	".....	Granite work.....	10	10	9	26	12	2 85	St'm.	Yes
349	Byram & Co.....	".....	Machinery.....	75	50	10	26	12	1 50	"	No
350	The United States Capsule Co.....	".....	Gelatine, etc.....	175	175	9	26	10	91	"	Yes

• Running 7 days per week.

Inspection Book No. 8.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
351	G. W. Cope	Detroit.	Patterns.....	6	6	10	26 12	\$2 00	Gas..	....	....
352	John Dwyer	"	Clay pipes.....	5	4	10	26 12	1 50	None	....	....
353	Laubhoff Bros	"	Cereals.....	12	3	10	26 12	67	Rent	....	....
354	Laubhoff Bros. Roller Mill Works.	"	Machinery.....	5	5	10	26 12	2 00	St'm.	No	....
355	U. S. Fermentum Co.....	"	Fermentum..	16	7	*24	26 10	2 86	"	"	....
356	R. H. Fyfe & Co.....	"	Custom shoes	11	11	10	26 12	1 18	None	....	....
357	C. A. Shafer	"	Tailoring.....	21	21	9	26 12	1 90	Elec.	....	....
358	Gormully & Jeffery Mfg. Co.....	"	Repairs.....	5	3	10	26 12	2 00	None	....	....
359	C. F. Pennewell Co.....	"	Millinery.....	20	20	9	26 12	1 00	"	....	....
360	Hunter & Hunter.....	"	Dresses.....	77	77	9	26 12	1 95	"	....	....
361	W. P. Murry.....	"	Candles.....	7	3	10	26 12	1 67	"	....	....
362	J. C. Kuhn.....	"	".....	10	7	9	26 12	1 00	"	....	....
363	Traub Bros. Co.....	"	Jewelry.....	11	11	9	26 12	1 00	Elec.	....	....
364	Monarch Co.....	"	Repairs.....	3	3	10	26 12	1 67	None	....	....
365	The Geo. T. Crooks Co.....	"	Elec. goods..	10	5	9	26 12	2 20	"	....	....
366	J. M. Scott.....	"	Repairs.....	3	3	10	26 12	1 33	"	....	....
367	F. G. Curtis & Co.....	"	Signs.....	15	3	9	26 12	3 00	"	....	....
368	F. C. Lewerenz.....	"	Clothing.....	4	4	10	26 12	2 50	"	....	....
369	The Harry J. Dean Co.....	"	Painting, etc.	35	20	9	26 12	2 25	"	....	....
370	August Kurapke.....	"	Clothing.....	2	2	10	26 12	1 33	"	....	....
371	Lewis Miller.....	"	".....	7	7	10	26 12	1 71	"	....	....
372	J. B. Simon.....	"	".....	7	5	9	26 12	2 00	"	....	....
373	Wm. C. Simon.....	"	".....	5	5	9	26 12	1 80	"	....	....
374	Vans Print.....	"	Printing.....	2	2	10	26 12	2 00	Hand	....	....
375	Griswold Press.....	"	".....	3	3	10	26 12	2 00	Elec.	....	....
376	W. J. Ingram.....	"	Engraving....	2	2	10	*28 12	2 50	None	....	....
377	W. J. Swan.....	"	".....	2	2	10	26 12	2 50	"	....	....
378	E. E. Juterbock.....	"	".....	2	2	10	26 12	2 50	"	....	....
379	J. F. Plumley.....	"	Jewelry.....	4	4	10	26 12	2 00	Elec.	....	....
380	B. Swaid.....	"	Clothing.....	4	3	10	26 12	1 33	None	....	....
381	Davey & Co.....	"	Electric fix..	4	4	10	26 12	2 25	Elec.	....	....
382	Hugh McDonald Co.....	"	Plumbing.....	10	8	9	26 12	2 50	None	....	....
383	Detroit Cutlery Co.....	"	Cutlery.....	3	2	10	26 12	1 87	"	....	....
384	Ideal Mfg Co.....	"	Plumbing.....	1100	490	10	26 12	1 37	St'm.	No	....
385	Wm. Mill.....	"	Dressed lum..	15	15	10	26 12	1 67	"	"	....
386	R. McKinzie & Son.....	"	Ironwork.....	12	12	10	26 12	2 33	"	"	....
387	Walter Oades.....	"	Ships.....	100	60	10	26 12	2 08	"	"	....
388	The Standard Foundry Co..	"	Castings.....	60	25	10	26 12	2 40	"	"	....
389	A. F. Albertain.....	"	Shirts.....	6	6	9	26 12	75	Rent.	....	....
390	Trojan Laundry.....	"	Laundry.....	45	39	9	26 12	1 78	St'm.	No	....
391	Det. River Gasoline Engine Wks.	"	Repairs.....	8	6	10	26 12	2 50	"	"	....
392	Delta Lumber Co.....	"	Lumber.....	160	30	10	26 10	1 67	"	Yes	....
393	Madam Shepard.....	"	Dresses.....	15	12	10	26 12	1 25	None	....	....
394	Alvord & Co.....	"	Photographs.	4	4	10	26 12	1 75	"	....	....
395	Fietze-Milo Cleaning & Dye Co..	"	Cleaning.....	4	4	10	26 12	1 50	"	....	....
396	J. C. Hasse & Co.....	"	Clothing.....	28	28	10	26 12	1 89	Elec.	....	....
397	R. L. Ginsburg & Son.....	"	Scrap iron....	20	18	10	26 12	1 56	None	....	....
398	C. F. Hogg & Son.....	"	Repairs.....	2	2	10	26 12	2 00	"	....	....
399	C. H. Elston & Co.....	"	Signs.....	3	3	10	26 12	3 00	"	....	....
400	James Miller.....	"	Models.....	2	2	10	26 12	2 00	"	....	....

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 9.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
401	Jos. Baker.....	Detroit.....	Repairs.....	4	4	10	26	12	\$2.25	None	.....
402	S. Hawman & Son.....	"	Plumbing.....	3	3	10	26	12	3.67	"	.....
403	Lillian Moylan.....	"	Corsets.....	3	2	10	26	12	1.50	"	.....
404	Keves & Grobbel.....	"	Repairs.....	3	2	10	26	12	1.50	"	.....
406	Mich. Shoe Repair Co.....	"	"	4	2	10	26	12	2.00	"	.....
406	John A. DeTar.....	"	Signs.....	12	4	10	26	12	3.00	"	.....
407	S. Smith.....	"	Clothing.....	4	4	10	26	12	2.50	"	.....
408	Cadillac Laundry.....	"	Laundry.....	10	9	10	26	12	1.33	St'm.	Yes
409	McConnell & Co.....	"	Clothing.....	4	4	10	26	12	2.50	None	.....
410	Det. Furnace & Heater Co.....	"	Heaters.....	35	6	9	26	12	2.00	St'm.	Yes
411	Fred Kahl.....	"	Castings.....	35	30	10	26	12	2.33	"	No
412	East End Boiler Works.....	"	Boilers.....	46	29	10	26	12	2.07	"	.....
413	James H. Stone & Co.....	"	Printing.....	25	25	9	26	12	2.40	Gas	.....
414	Wm. H. Miller & Co.....	"	Furs.....	100	75	9	26	12	2.20	Elec.	.....
415	Lewis Golden.....	"	Clothing.....	12	10	10	26	12	1.80	None	.....
416	A. E. Gerow.....	"	Harnesses.....	3	2	10	26	12	2.00	"	.....
417	Det. Shoe Repair Co.....	"	Repairs.....	4	2	10	26	12	2.00	"	.....
418	Bentley & Burbank.....	"	Decorating.....	15	9	9	26	12	2.22	"	.....
419	H. B. Barker & Son.....	"	Repairs.....	5	4	10	26	12	2.00	"	.....
420	W. H. Huss Co.....	"	Clothing.....	21	21	10	26	12	1.86	"	.....
421	M. C. Martin & Co.....	"	Signs.....	4	3	9	26	12	3.00	"	.....
422	Wm. Diedrick.....	"	Decorating.....	10	7	9	26	12	2.14	"	.....
423	S. M. Farley.....	"	Clothing.....	5	5	10	26	12	2.00	"	.....
424	S. Stone.....	"	Hair goods.....	3	3	10	26	12	1.67	"	.....
425	John S. Foster.....	"	Photographs.....	4	4	9	26	12	3.25	"	.....
426	Rothschild Millinery Co.....	"	Hats.....	15	15	10	26	12	1.13	"	.....
427	W. E. Shemild & Co.....	"	Photographs.....	4	4	10	26	12	1.75	"	.....
428	N. K. Standard.....	"	Optical sup.....	2	2	10	26	12	2.50	"	.....
429	Geo. E. Angell.....	"	Candles.....	4	4	10	26	12	1.75	"	.....
430	Mme. Weaver.....	"	Millinery.....	10	10	10	26	12	1.50	"	.....
431	Goldberg Bros.....	"	Clothing.....	12	12	10	26	12	1.16	"	.....
432	Grinnell Bros.....	"	Repairs.....	10	8	10	26	12	1.88	"	.....
433	Kouen Hunt.....	"	Millinery.....	10	6	10	26	12	1.66	"	.....
434	Fox & Hay.....	"	Clothing.....	4	4	10	26	12	3.00	"	.....
435	Wm. H. Elliott.....	"	Cloaks.....	4	3	10	26	12	1.33	"	.....
436	Palace Laundry Co.....	"	Laundry.....	100	100	10	26	12	80	St'm.	No
437	C. Henry Licht.....	"	Clothing.....	5	5	10	26	12	2.40	None	.....
438	James Greer.....	"	Baked goods.....	3	3	10	26	12	1.67	"	.....
439	American Specialty Co.....	"	Dentists sup.....	2	2	10	26	4	2.00	"	.....
440	Larned, Carter & Co.....	"	Clothing.....	125	125	9	26	12	1.00	Elec.	.....
441	Detroit Shipbuilding Co.....	"	Ships.....	500	500	9	26	12	2.00	St'm.	No
442	Haste & Harris.....	"	Baked goods.....	35	35	9	26	12	1.00	"	.....
443	Geo. Mitchell.....	"	Clothing.....	4	4	10	26	12	1.00	None	.....
444	Excelstor Corset & Skirt Co.....	"	Corsets, etc.....	12	12	9	26	12	1.42	Elec.	.....
445	Ives & Wolf.....	"	Wagon rep.....	7	7	10	26	12	2.00	None	.....
446	W. P. Gordon.....	"	Cigars.....	3	3	8	26	12	1.67	"	.....
447	Banner Laundering Co.....	"	Laundry.....	125	106	9	26	12	88	S & E	No
448	Brown Bros. Co.....	"	Cigars.....	675	675	9	26	12	85	Elec.	.....
449	J. J. McKay.....	"	Clothing.....	3	3	10	26	12	2.00	None	.....
450	Larry Coleman.....	"	Repairs.....	4	4	10	26	12	1.75	"	.....

Inspection Book No. 10.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
451	Columbus Mfg. Co.....	Detroit.....	Frames.....	8	8	10	26	12	\$1 50	Elec.	....
452	Holtz & Co.....	"	Clothing.....	3	3	10	26	12	1 67	None	....
453	Harriet Mellus.....	"	Millinery.....	3	3	10	26	12	1 00	"	....
454	C. S. Wirick.....	"	Gloves.....	25	10	10	26	12	1 25	Elec.	....
455	W. H. Allen & Co.....	"	Shirt waists..	35	15	9½	26	12	1 00	Rent.	....
456	Chas. L. Roehn & Son.....	"	Binding.....	15	15	10	26	12	1 33	"	....
457	Geo. Hatt & Son.....	"	Cloth spong..	6	6	9	26	12	1 66	"	....
458	U. S. Chemico Wood Co.....	"	Handles.....	85	60	10	26	12	57	"	....
459	National Supply Co.....	"	Perfumes.....	14	14	9	26	12	1 25	None	....
460	Free Press Printing Co.....	"	Printing.....	40	40	9	26	12	1 75	St'm.	No
461	McKenney Button Fastener Co..	"	Fasteners.....	15	15	10	26	12	2 00	Rent.	....
462	Parisian Steam Laundry.....	"	Laundry.....	88	88	9	26	12	83	St'm.	No
463	McNeill & Dhondt.....	"	Iron work.....	3	4	10	26	12	2 00	None	....
464	W. E. Jackson.....	"	Printing.....	2	2	9	26	12	1 50	"	....
465	Wm. J. Standfield.....	"	Repairs.....	3	3	10	26	12	2 00	"	....
466	J. D. Jackson.....	"	Machine w'k..	3	3	10	26	12	2 00	"	....
467	Eureka Sign and Japan'g Co.....	"	Signs.....	6	6	10	26	12	83	"	....
468	John Kissane.....	"	Repairs.....	3	2	10	26	12	2 00	"	....
469	R. Standfield & Co.....	"	Building.....	3	3	10	26	12	2 33	"	....
470	Blome Bros.....	"	Frames.....	3	3	10	26	12	1 33	"	....
471	Morgan, Puhl & Morris.....	"	Milit'y goods.	80	70	9	26	12	1 14	"	....
472	Fisk & Olds.....	"	Shoes.....	35	34	9	26	12	1 15	"	....
473	Kolbe Bros.....	"	Baked goods..	5	5	10	26	12	2 00	"	....
474	Julius Bing.....	"	Cigars.....	9	9	8	26	12	1 78	"	....
475	Wheeler & Wilson.....	"	Machines.....	2	2	10	26	12	2 00	"	....
476	Economy Cycle Co.....	"	Repairs.....	3	3	10	26	12	1 67	"	....
477	The Edison Illuminating Co.....	"	Electricity...	26	26	24	30	12	1 61	St'm.	Yes
478	Winder Printing Co.....	"	Printing.....	5	5	9	26	12	2 00	Elec.	....
479	Tower Bros.....	"	Cream.....	45	45	10	30	12	1 56	St'm.	Yes
480	Wolverine Cycle Co.....	"	Repairs.....	3	3	9	26	12	2 17	None	....
481	Commercial Papier-Mache W'ks.	"	Papier-mache	30	30	9	26	12	83	"	....
482	Detroit Metallic Casket Co.....	"	Caskets.....	25	25	10	26	12	1 60	Elec.	....
483	Art Manufacturing Co.....	"	Frames.....	3	3	10	26	12	1 67	None	....
484	F. A. Gauss.....	"	Baked goods..	4	4	10	26	12	2 25	"	....
485	French Millinery parlors.....	"	Millinery.....	4	4	10	26	12	1 75	"	....
486	James Wilson.....	"	Clothing.....	3	3	10	26	12	1 33	"	....
487	B. Randolph.....	"	Iron work.....	3	3	10	26	12	1 67	"	....
488	Frank A. Wiederding.....	"	Gas stoves....	40	35	10	26	12	1 00	Gas	....
489	J. Blenkle & Co.....	"	Repairs.....	10	10	10	26	12	2 20	None	....
490	Jas. Riddle.....	"	Blacksmith'g	3	3	9	26	12	2 70	"	....
491	Albert Rohns & Co.....	"	Iron work.....	8	3	9	26	12	1 83	Gas	....
492	Van Leyen & Hensler.....	"	Engraving.....	15	15	10	26	12	1 33	None	....
493	A. Schlesinger & Co.....	"	Clothing.....	20	7	9	26	12	1 29	Rent.	....
494	The Norris Co.....	"	Laundry.....	60	60	9	26	12	1 00	St'm.	No
495	The Norris Co.....	"	Collars, etc...	100	100	9	26	12	1 00	"	....
496	W. S. Piggins.....	"	Cut stone.....	30	16	8	26	12	3 12	None	....
497	Michigan Casket Co.....	"	Caskets.....	12	12	9	26	12	1 33	St'm.	Yes
498	Victor Jar Co.....	"	Fasteners.....	20	12	10	26	12	1 42	Gas	....
499	H. Burnstine Co.....	"	Rags.....	16	14	7	22	12	64	None	....
500	John Oils.....	"	Baked goods..	12	12	10	26	12	1 50	Elec.	....

• Running day and night.
 • Running 7 days per week.

Inspection Book No. 11.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
501	Ed. Gies	Detroit.	Repairs.....	3	2	10	26 12	\$2 00	None	.....	.....
502	Huebner Mfg. Co.	"	Sash, etc.....	35	35	10	26 12	1 16	St'm.	Yes	.....
503	The C. H. Little Co.....	"	Lime.....	10	10	10	26 12	1 00	None	.....	.....
504	F. A. Beer	"	Blacksmith'g	3	2	10	26 12	2 00	"	.....	.....
505	Samuel F. Hodge & Co.....	"	Machinery...	100	100	10	26 12	2 50	St'm.	No	.....
506	Young Bros.	"	Iron work....	65	4	9	26 12	2 50	Rent.	.....	.....
507	Det. Railroad Elevator Co	"	Grain.....	16	7	8	26 12	1 43	St'm.	No	.....
508	Detroit Granite Co.....	"	Granite work.	4	2	8	26 12	3 00	None	.....	.....
509	Pabst Beer Bottling Dept.....	"	Beer.....	5	3	10	26 12	2 33	"	.....	.....
510	Michigan Soap Co.....	"	Soap.....	16	10	10	26 12	1 50	St'm.	Yes	.....
511	J. Hollorian.....	"	Blacksmith'g	3	2	9	26 12	2 50	None	.....	.....
512	T. H. Eaton & Son	"	Extract.....	5	5	10	26 12	1 60	St'm.	Yes	.....
513	Citizens St. Ry. Power House.....	"	Electricity...	26	26	12	30 12	2 46	"	No	.....
514	Detroit Elec. Ry. Power House.....	"	".....	15	11	12	30 12	2 09	"	Yes	.....
515	Grand Trunk Round House.....	"	Repairs.....	42	42	10	30 12	1 45	"	No	.....
516	M. Wisper	"	Clothing.....	20	20	10	26 12	1 00	Elec.	.....	.....
517	I. Lipsitz.....	"	Cigars.....	3	3	8	26 12	2 00	None	.....	.....
518	Jos. J. Marks	"	Coats.....	40	40	10	26 12	88	Elec.	.....	.....
519	Mardien & Heck.....	"	Painting.....	5	5	10	26 12	2 40	None	.....	.....
520	M. T. Miller.....	"	Clothing.....	3	3	10	26 12	1 67	"	.....	.....
521	Morrison & Co.....	"	Rags.....	10	10	8	26 12	90	"	.....	.....
522	The Huettelman & Cramer Co.....	"	Machinery...	60	59	10	26 12	1 80	St'm.	Yes	.....
523	M. Jacobson.....	"	Rags.....	8	4	7	22 12	1 50	None	.....	.....
524	Detroit Pattern Works.....	"	Patterns.....	20	17	10	26 12	1 78	Rent.	.....	.....
525	Graebert & Purdie.....	"	Brass goods..	5	5	10	26 12	2 00	"	.....	.....
526	Det. Bedding & Upholster'g Co.....	"	Mattresses...	14	11	10	26 12	1 36	St'm.	No	.....
527	Capitol Brass Works	"	Brass goods..	40	25	10	26 12	1 80	Gas.	.....	.....
528	A. M. Peretra.....	"	Printing.....	4	2	9	26 12	2 50	None	.....	.....
529	John Petshold.....	"	Wire work...	3	3	10	26 12	1 67	"	.....	.....
530	A. M. Shellfish.....	"	Printing.....	2	2	10	26 12	2 00	"	.....	.....
531	John Wacker.....	"	Barrels.....	10	2	10	26 12	2 50	St'm.	No	.....
532	J. F. Weber.....	"	B'ldg mat....	15	12	8 1/2	26 12	1 50	"	.....	.....
533	Goebel Brewing Co.....	"	Beer.....	84	84	9	26 12	2 12	"	Yes	.....
534	S. Holtz.....	"	Bread.....	3	3	10	26 12	2 33	None	.....	.....
535	C. Rothchild.....	"	Millinery.....	5	5	10	26 12	1 20	"	.....	.....
536	Herman T. Warock.....	"	Frames.....	3	3	10	26 12	1 67	"	.....	.....
537	E. Gruener.....	"	Baked goods..	3	2	10	26 12	2 00	"	.....	.....
538	C. Baumann & Son.....	"	Repairs.....	6	6	9	26 12	2 50	"	.....	.....
539	Ruoff Brewing Co.....	"	Beer.....	8	8	8	26 12	2 50	St'm.	Yes	.....
540	Stroh Brewing Co.....	"	".....	110	110	9	26 12	2 08	"	.....	.....
541	Detroit Candy Co.....	"	Candy.....	25	25	10	26 12	80	Elec.	.....	.....
542	Behr Bros.....	"	Pullery.....	10	10	10	26 12	1 40	None	.....	.....
543	John Mann.....	"	Sauerkraut...	5	2	10	26 6	1 50	"	.....	.....
544	Carl Humer.....	"	Parquetry....	6	3	10	26 10	2 33	Gas.	.....	.....
545	W. F. Stimpson Co.....	"	Scales.....	55	50	10	26 6	1 68	St'm.	Yes	.....
546	Shepherd & Nicola.....	"	Blacksmith'g	4	4	9	26 12	2 50	None	.....	.....
547	John Johnson.....	"	Awnings.....	14	13	10	26 12	1 54	"	.....	.....
548	Detroit Barrel Co.....	"	Barrels.....	33	33	10	26 10	1 51	St'm.	No	.....
549	G. C. Henderson.....	"	Blacksmith'g	4	3	9	26 12	2 67	None	.....	.....
550	John Owston.....	"	Pies.....	7	7	10	26 12	1 72	St'm.	Yes	.....

° Running 7 days per week.

° Running over 10 hours per day.

Inspection Book No. 12.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
551	H. E. Bottie.....	Detroit.....	Horse collars.....	3	2	10	26 12	2	\$2 00	None	....
552	Kennedy & Greig.....	"	Machinery.....	10	7	10	26 12	2	28	St'm.	Yes
553	V. Zimmel.....	"	Cigars.....	4	3	10	26 12	1	67	None	....
554	Paul Bader.....	"	Baked goods.....	8	8	10	26 12	1	25	"	....
555	Frank Licht.....	"	Clothing.....	6	3	10	26 12	2	00	"	....
556	John Hopkins Carriage Co.....	"	Carriages, etc.....	8	6	10	26 12	2	50	"	....
557	Jas. McCool.....	"	Blacksmithing.....	3	2	9	26 12	2	50	"	....
558	A. Sabin & Son.....	"	Harnesses.....	3	3	10	26 12	2	00	"	....
559	Chas. Paschke.....	"	Grates, etc.....	4	4	10	26 12	2	00	"	....
560	The Almonte Cigar Co.....	"	Cigars.....	23	19	8	26 12	1	05	"	....
561	Gem Fibre Packing Co.....	"	Fiber pkgs.....	25	18	10	26 8	1	11	St'm.	No
562	Coonley Medicine Co.....	"	Medicine.....	14	14	9	26 12	1	28	Gas..	....
563	Alex. Gordon.....	"	Cigars.....	150	150	8	26 12	1	00	St'm.	No
564	Smith & Licht.....	"	Clothing.....	5	5	10	26 12	2	00	None	....
565	Pierson & Hough.....	"	Harnesses, etc.....	40	40	10	26 12	1	50	Elec.	....
566	Pierson & Hough.....	"	Horse collars.....	20	20	10	26 12	1	50	"	....
567	A. Funke.....	"	Soft drinks.....	5	5	10	26 12	1	80	None	....
568	Peters Bros.....	"	Clean carpets.....	8	8	10	26 12	1	37	St'm.	No
569	Endriss Brewing Co.....	"	Beer.....	4	3	9	26 12	2	67	"	....
570	W. E. Johnson.....	"	Repairs.....	2	2	10	26 12	2	00	None	....
571	Columbia Brewing Co.....	"	Beer.....	11	11	9	26 12	2	63	St'm.	Yes
572	C. Kaiser & Son.....	"	Leather.....	15	15	10	26 12	1	67	"	....
573	Graeb & Rath.....	"	Soft drinks.....	3	3	10	26 12	1	67	None	....
574	B. Harris.....	"	Sort rags.....	9	9	10	26 12	78	"	"	....
575	Joseph Canto.....	"	Cigars.....	6	6	8	26 12	2	00	"	....
576	F. A. Decker.....	"	Upholstering.....	4	4	8	26 12	1	75	"	....
577	A. Dimler.....	"	Iron work.....	3	2	10	26 12	2	00	"	....
578	Western Cigar Box Mfg. Co.....	"	Boxes.....	100	100	10	26 12	90	Gas..	....
579	Star Carpet Cleaning Works.....	"	Carpets.....	10	10	10	26 12	1	40	St'm.	Yes
580	The Western Ladies Hat Mfg. Co.....	"	Hats.....	13	8	9	26 12	75	Hand	....
581	Frank S. Armstrong & Co.....	"	Regalias.....	45	45	9½	26 12	1	22	Elec.	....
582	Thorp, Hawley & Co.....	"	Candles.....	100	80	10	26 12	1	25	St'm.	No
583	E. Frolich Glass Co.....	"	Glass, etc.....	60	50	10	26 12	1	66	Elec.	....
584	Thomas Jumer.....	"	Parquetry.....	12	12	9	26 12	1	75	"	....
585	Barnes Novelty Co.....	"	Novelties.....	7	3	9	26 12	1	33	"	....
586	Detroit Rubber Stamp Co.....	"	Stamps.....	8	8	10	26 12	1	25	Hand	....
587	Lion Compressed Yeast Co.....	"	Yeast.....	14	14	9	26 12	2	00	"	....
588	Porter Printing Co.....	"	Printing.....	12	6	9	26 12	1	50	"	....
589	B. Silverman.....	"	Cigars.....	3	3	8	26 12	2	00	None	....
590	The Enterprise Clothes Clean. Co.....	"	Cleaning.....	7	7	9	26 12	1	50	Hand	....
591	Wood's Railway Guide.....	"	Guide books.....	3	2	9	26 12	1	50	Elec.	....
592	Rule & Mack.....	"	Printing.....	25	25	9	26 12	1	17	"	....
593	Jacob Klenk.....	"	Baked goods.....	2	2	10	26 12	2	00	None	....
594	A. Wegner & Son.....	"	Soft drinks.....	6	4	10	26 12	1	75	Gas..	....
595	D. Karle.....	"	Iron work.....	20	15	9½	26 12	1	67	None	....
596	A. Posselius & Co.....	"	Furniture.....	20	20	9	26 12	95	St'm.	No	....
597	Columbia Laundry.....	"	Laundry.....	33	33	10	26 6	76	"	Yes	....
598	Hubert A. Meier.....	"	Cut stone.....	12	4	8	26 5	3	00	None	....
599	Anthony Muer.....	"	Cigars.....	12	12	8	26 12	1	42	"	....
600	F. Baulch.....	"	Repairs.....	4	4	10	26 12	1	45	Gas..	....

Inspection Book No. 13.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
601	Am. Paper Stock Co.	Detroit.	Sort paper.	39	39	9	26	12	\$0 56	None	....
602	F. Schimmel & Son.	"	Sausage.	5	5	10	26	12	1 80	Gas.	....
603	Enderling & Messing.	"	Cigars.	11	11	9	26	12	1 45	None	....
604	Diamond Stamp Ware Co.	"	Brass goods.	89	89	10	26	12	1 08	St'm.	Yes
605	Henry W. Koehler.	"	Repairs.	4	3	10	26	12	2 33	None	....
606	The Merz Capsule Co.	"	Capsules.	70	70	10	26	12	86	St'm.	Yes
607	L. Lootens.	"	Clothing.	3	2	10	26	12	1 50	None	....
608	J. Berg.	"	Repairs.	4	2	10	26	12	2 50	"	....
609	V. Lapeire.	"	Clothing.	2	2	10	26	12	1 50	"	....
610	Gillman Carpet Cleaning Works.	"	Carpets.	3	3	10	26	12	1 67	St'm.	Yes
611	Hosbach Bros.	"	Upholstering	3	3	10	26	12	2 33	None	....
612	Max Broeg, Jr.	"	Sausage.	3	3	10	26	12	1 67	St'm.	No
613	C. Temple.	"	Wagons.	5	4	10	26	12	2 25	None	....
614	Belz's Steam Bakery.	"	Baked goods.	10	10	10	26	12	2 00	Gas.	....
615	E. Juterbock.	"	Millinery.	3	3	10	26	12	1 33	None	....
616	Jos Gruss.	"	Wagons.	4	4	10	26	12	2 25	"	....
617	East Side Brewing Co.	"	Beer.	6	6	9	26	12	2 50	St'm.	No
618	Lagora, Fee Co.	"	Cigars.	70	70	8	26	12	1 00	None	....
619	Murphy Iron Works.	"	Castings.	100	100	10	26	12	2 30	St'm.	Yes
620	Buhl Malleable Co.	"	"	500	450	10	26	12	2 10	St'm.	....
621	Well & Co.	"	Furniture.	4	4	10	26	12	1 75	None	....
622	Thomas J. Walsh.	"	Jewelry.	3	3	10	26	12	2 67	"	....
623	F. Knoch & Co.	"	Sausage.	5	5	10	26	12	1 80	"	....
624	Elmer Fritsch.	"	Clothing.	5	5	10	26	12	1 60	"	....
625	Alexander Lewis.	"	Iron work.	40	20	9	26	12	2 00	Gas.	....
626	A. Froehlich & Son.	"	Soft drinks.	3	3	10	26	12	2 33	None	....
627	Parke, Davis & Co.	"	Drugs.	1350	1350	9	26	12	1 26	S & E	Yes
628	Peter Boden.	"	Clothing.	6	3	10	26	12	1 67	None	....
629	F. Rolshoven & Co.	"	Jewelry.	4	4	9	26	12	2 25	"	....
630	Beadle & Hallock.	"	Clothing.	3	3	10	26	12	2 67	"	....
631	L. A. Smith & Co.	"	Dresses.	35	30	10	26	12	1 03	Elec.	....
632	D. S. Phelps.	"	Hardware.	5	5	10	26	12	1 80	None	....
633	W. E. Barker & Co.	"	Furniture.	3	3	10	26	12	1 67	"	....
634	S. M. Hibbard.	"	Ice cream.	3	3	10	26	12	1 67	"	....
635	Roehm & Son.	"	Jewelry.	15	15	9	26	12	2 33	"	....
636	C. Hopp & Co.	"	"	3	3	10	26	12	2 00	Elec.	....
637	C. W. Marvin & Co.	"	Pianos.	4	4	10	26	12	2 75	None	....
638	Balsley & Thorpe.	"	Furniture.	4	4	10	26	12	2 25	"	....
639	John D. Mabley.	"	Clothing.	3	3	9	26	12	2 67	"	....
640	Ernst Kern.	"	Embroidery.	4	4	10	26	12	1 50	"	....
641	Ernst Kern.	"	Hats.	10	8	9	26	12	1 13	"	....
642	The L. Black & Co.	"	Optical goods.	5	5	10	26	12	2 40	"	....
643	Latimer, Legget & Co.	"	Pictures.	10	9	8	26	12	2 00	"	....
644	Detroit Music Co.	"	Pianos.	3	3	10	26	12	2 67	"	....
645	H. M. Kittle & Co.	"	Trunks.	4	4	10	26	12	2 00	"	....
646	Moll & Stock.	"	Clothing.	3	3	9	26	12	2 67	"	....
647	K. C. Craigle.	"	Furs.	15	7	10	26	12	1 71	"	....
648	C. Gerhard.	"	Printing.	10	8	10	26	12	1 00	"	....
649	The Michigan Stamp Co.	"	Sort stamps.	3	3	9	26	12	1 00	"	....
650	Det. Clothing Renewing Parlors.	"	Clothing.	4	4	10	26	12	1 75	"	....

Inspection Book No. 14.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
651	C. S. Dent & Co.	Detroit	Dentifrice	15	3	8½	26	3	\$1 83	Elec.	.....
652	Crawford Laundry Co.	"	Laundry	35	35	10	26	12	1 25	Rent.	.....
653	Trade Journal Association	"	Printing	3	3	9	26	12	1 50	Elec.	.....
654	Commercial Printing Co.	"	"	4	3	9	26	12	1 33	"	.....
655	Ostler Printing Co.	"	"	4	4	9	26	12	1 50	"	.....
656	Evening News Association	"	Newspapers, etc	250	250	9	26	12	2 67	St'm.	Yes
657	Scott Bros	"	Elec. goods	10	8	9	26	12	1 50	Elec.	.....
658	J. Berlin	"	Cloth caps	20	12	10	26	12	1 08	"	.....
659	Mildner & Steinmann	"	Sculpture	3	3	9	26	9	2 00	None	.....
660	Wm. Inglis Wire & Iron Works.	"	Wire, etc.	20	14	9	26	12	2 00	Elec.	.....
661	C. R. Mueller	"	Machines	4	4	10	26	12	1 50	Gas.	.....
662	Peninsular Engraving Co.	"	Engraving	40	40	9	26	12	2 50	Elec.	.....
663	Feldman & Moscovitz	"	Cloth caps	10	10	10	26	12	1 50	"	.....
664	Mr. B. Booske	"	Millinery	4	3	10	26	12	1 33	None	.....
665	Mrs. W. Kliensmith	"	"	3	3	10	26	12	1 33	"	.....
666	Chene & Co.	"	Decorating	3	3	10	26	12	2 00	"	.....
667	C. R. Trombly	"	Repairs	10	5	10	26	12	1 60	"	.....
668	Cassada & Burk	"	Blacksmith's g	3	3	10	26	12	2 67	"	.....
669	W. R. Haering	"	Clothing	3	3	10	26	12	1 67	"	.....
670	H. Herpel	"	Baked goods	3	3	10	26	12	1 67	"	.....
671	A. Jacobs	"	Clothing	4	2	6	26	12	1 00	"	.....
672	Joseph Rause	"	"	9	9	10	26	12	1 00	"	.....
673	Theo. O. Muller	"	Blacksmith's g	2	2	9	26	12	2 50	"	.....
674	A. Becker	"	Baked goods	3	3	10	26	12	2 00	"	.....
675	Mrs. J. Clapp	"	Dresses	3	3	9	26	12	1 33	"	.....
676	Watko & Dietz	"	Printing	3	9	9	26	12	2 67	St'm.	No
677	F. M. Stemmelen	"	Harnesses	2	2	10	26	12	2 00	None	.....
678	Adolph Zschunke	"	Carpets	2	2	10	26	12	1 50	"	.....
679	The Hoffman Mfg. Co.	"	Furniture	36	36	9	26	12	1 40	St'm.	Yes
680	Michael Schauer	"	Carpets	3	3	10	26	12	1 33	None	.....
681	John Refior & Son	"	Clothing	3	3	10	26	12	2 00	"	.....
682	Mrs. R. Straub	"	Millinery	3	3	10	26	12	1 00	"	.....
683	Ernst Orling	"	Sausage	4	4	10	26	12	1 75	Gas.	.....
684	John A. Lage	"	Clothing	3	3	10	26	12	1 67	None	.....
685	Leo. Taube	"	Sausage	3	3	10	26	12	1 67	Gas.	.....
686	Walter Weber	"	Baked goods	3	3	10	26	12	2 00	None	.....
687	The Wayne Soap Co.	"	Soap	6	6	10	26	9	1 50	St'm.	Yes
688	Frank E. Hoy	"	Clothing	3	3	10	26	12	1 67	None	.....
689	Charles Nagel	"	"	3	3	10	26	12	1 67	"	.....
690	L. Kull	"	Baked goods	3	3	10	26	12	2 00	"	.....
691	August Gessler	"	Blacksmith's g	2	2	9	26	12	2 00	"	.....
692	Def. Rattan & Reed Works	"	Baby carriages	4	4	9	26	12	2 00	"	.....
693	Paul Bott	"	Blacksmith's g	3	3	10	26	12	2 00	"	.....
694	L. M. Peters	"	Carpets, etc.	7	5	10	26	12	1 60	"	.....
695	A. W. Herschleb	"	Baked goods	5	5	10	26	12	2 20	Gas.	.....
696	Becker Piano Co.	"	Pianos	2	2	10	26	12	2 00	None	.....
697	A. M. Bourdeau	"	Stoves	2	2	10	26	12	2 00	"	.....
698	C. Whiting	"	Ice cream	2	2	10	10	7	1 50	Gas.	.....
699	Fred W. Frey	"	Beer	3	3	9	26	12	2 67	St'm.	No
700	K. Fucht	"	Millinery	30	18	9	26	12	83	None	.....

Inspection Book No. 15.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employes when running full capacity.	Number of employes at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
701	Alexander Voeten.....	Detroit.....	Blacksmith'g	3	3	9	26 12	\$2 67	None	.....	.....
702	Frederick Bengelsdorf.....	"	Carpets	2	2	9	26 12	1 50	"	.....	.....
703	Wm. Sauer & Son.....	"	Barrels	25	25	9	26 12	1 60	"	.....	.....
704	Chas. Wohlfell.....	"	Upholstering	3	3	10	26 12	1 67	"	.....	.....
705	Henry Krentz.....	"	Cigars	6	6	8	26 12	1 16	"	.....	.....
706	Mrs. A. Janke.....	"	Millinery	6	2	10	26 12	1 00	"	.....	.....
707	Fred Ruoff.....	"	Blacksmith'g	3	3	9	26 12	2 67	"	.....	.....
708	J. G. Junker.....	"	"	5	5	10	26 12	2 20	"	.....	.....
709	The Verbiest Mfg. Co.....	"	Furniture	23	23	9	26 12	1 91	St'm.	No	.....
710	C. W. Kotcher.....	"	Sash, etc.....	65	65	9	26 12	1 31	"	Yes	.....
711	Louis Steiner.....	"	Baked goods	8	8	10	26 12	1 62	Gas..	.....	.....
712	Mrs. Paul F. Ziel.....	"	Millinery	6	2	10	26 12	1 00	None	.....	.....
713	Otto Schemansky & Son.....	"	Monuments	13	9	10	26 12	2 55	Gas..	.....	.....
714	Henry Lemmer's Sons.....	"	"	12	5	9	26 12	2 80	None	.....	.....
715	August Lemmer.....	"	"	3	2	9	26 12	2 50	"	.....	.....
716	Peter Stenius.....	"	Baskets	9	9	10	26 12	1 33	St'm.	No	.....
717	Union Brewing Co.....	"	Beer	9	9	9	26 12	2 33	"	Yes	.....
718	L. Niman.....	"	Clothing	5	5	10	26 12	2 00	None	.....	.....
719	Ballman & Baldwin.....	"	Building	3	3	9	26 12	2 00	"	.....	.....
720	Frank F. Liska.....	"	Clothing	3	3	9	26 12	2 67	"	.....	.....
721	The J. R. Pearson Co.....	"	Fixtures	4	4	10	26 12	1 75	"	.....	.....
722	Alfred Hack.....	"	Decorating	20	15	9	26 12	1 70	"	.....	.....
723	Hampton & Astleford.....	"	Repairs	4	4	9	26 12	2 00	"	.....	.....
724	J. D. Case.....	"	Blacksmith'g	4	4	9	26 12	2 50	"	.....	.....
725	Wm. O'Leary & Co.....	"	Pictures	4	4	9	26 12	2 00	"	.....	.....
726	Arthur & Philbric.....	"	Photographs..	12	10	9	26 12	1 80	"	.....	.....
727	T. Helne.....	"	Furs	10	5	10	26 12	2 00	"	.....	.....
728	D. J. Healy.....	"	Needlework	4	4	10	26 12	1 75	"	.....	.....
729	Huntington & Clark.....	"	Photographs..	15	12	9	26 12	1 42	"	.....	.....
730	D. J. Cook & Co.....	"	"	4	4	9	26 12	1 75	"	.....	.....
731	Beals & Selkirk.....	"	Trunks	4	4	10	26 12	2 00	"	.....	.....
732	Geo. R. Angell.....	"	Frames	4	4	10	26 12	1 50	"	.....	.....
733	The White Sewing Machine Co.	"	Repairs	4	4	10	26 12	2 25	"	.....	.....
734	A. G. McMichael.....	"	Photographs.	4	4	9	26 12	2 25	"	.....	.....
735	Marvin & Brown.....	"	"	10	10	10	26 12	2 00	"	.....	.....
736	Cornehl & Sons.....	"	Bookbinding..	12	12	9	26 12	2 08	Gas..	.....	.....
737	Gregory, Mayer & Thorn Co.....	"	Stationery.....	22	22	9	26 12	1 23	Elec.	.....	.....
738	Bookkeeper Pub. Co., Ltd.....	"	Printing.....	7	7	9	26 12	2 00	"	.....	.....
739	Lawrence Pub. Co.....	"	N'wsp'rs, etc.	20	15	8	26 12	2 00	G & E	.....	.....
740	Ockford Printing Co.....	"	Printing.....	15	15	9	26 12	1 11	Elec.	.....	.....
741	Wm. Reid.....	"	Show cases..	20	15	9	26 12	2 00	Gas..	.....	.....
742	Western Paper Box Co.....	"	Paper boxes..	20	15	10	26 12	1 15	Elec.	.....	.....
743	Friesema Bros. Printing Co.....	"	Printing.....	15	15	9	26 12	2 00	"	.....	.....
744	Wm. Suckert's Sons.....	"	Bookbinding..	25	25	9	26 12	1 20	"	.....	.....
745	Peninsular Engraving Co.....	"	Elec. plates..	10	10	9	26 12	2 50	"	.....	.....
746	R. & E. Wuelfing.....	"	Machines.....	3	3	10	26 12	2 00	St'm.	Yes	.....
747	Michigan Upholstering Co.....	"	Upholstering	38	38	10	26 11	1 60	None	.....	.....
748	Chas. F. Boldt.....	"	Cigars	5	4	8	26 12	1 19	"	.....	.....
749	Pingree & Smith.....	"	Shoes.....	700	800	9	26 12	1 67	St'm.	No	.....
750	Calvert Lithographing Co.....	"	Lithographs..	375	350	8	26 12	1 64	"	Yes	.....

Inspection Book No. 16.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
751	Snedicor & Hathaway Co.	Detroit.	Shoes.	70	70	10	26	12	\$1 43	Rent	....
752	Dimmer Machine Works.	"	Machines.	6	6	10	26	12	1 83	Elec.	....
753	Sales Bros.	"	Supplies.	14	14	10	26	12	1 61	Gas.	....
754	Morgan & Whately.	"	Skirts.	110	60	10	26	11	80	"	....
755	Babbitt & Graham	"	"	40	40	9	26	12	90	Elec.	....
756	Lambert & Lowman	"	Chemicals.	40	20	9	26	12	1 00	"	....
757	Globe Paper Co.	"	Paper bags.	12	2	9	26	12	1 00	None	....
758	Voelkner & Reinke Mfg. Co.	"	Specialties.	35	30	10	26	12	2 00	G & E	....
759	American Brush Co.	"	Brushes.	65	40	10	26	12	1 12	Gas.	....
760	Ryan Bros.	"	Knit goods.	75	60	8½	26	12	70	Elec.	....
761	Niagara Bottling Works.	"	Beer.	3	3	10	26	12	1 50	None	....
762	The Michigan Stove Co.	"	Stoves, etc.	1000	800	10	24	11	2 30	S & E	Yes
763	Wright, Kay & Co.	"	Jewelry.	65	65	9½	26	12	2 31	Elec.	....
764	Schlemann & Marty.	"	Baked goods.	15	15	10	26	12	2 20	None	....
765	Capitol Steam Laundry.	"	Laundry.	42	40	9	26	12	1 12	St'm.	Yes
766	L. B. Matzka.	"	Picture fr'ms.	5	4	10	26	12	1 75	None	....
767	Cummings Laundry Co.	"	Laundry.	18	18	9	26	12	1 11	St'm.	Yes
768	J. Burns, Meyer & Co.	"	Blacksmith'g	3	2	10	26	12	2 50	None	....
769	The Ireland & Mathews Mfg. Co.	"	Brass goods.	500	450	10	26	12	1 44	S & G	Yes
770	Welded Steel Barrel Corporat'n.	"	Barrels.	50	50	9½	26	12	1 40	St'm.	"
771	Berry Bros.	"	Varnish.	150	150	10	26	12	1 33	"	No
772	Queen Ann Soap Co.	"	Soaps.	35	35	9½	26	12	1 51	"	Yes
773	J. L. Hudson & Co.	"	Clothing.	25	24	9½	26	12	1 62	Elec.	....
774	Artista' Model Corset Co.	"	Corsets.	12	5	9	26	12	1 40	"	....
775	Mrs. M. T. Courtney.	"	Dresses.	25	18	9	26	12	1 00	None	....
776	J. L. Hudson Co.	"	Millinery.	15	5	9	26	12	1 60	"	....
777	Hudson & Symington.	"	Upholstering	6	6	10	26	12	2 00	"	....
778	Chas. H. Smith.	"	Buttons.	5	5	10	26	12	1 40	"	....
779	Geo. E. Angell.	"	Candies.	6	6	9	26	12	1 66	"	....
780	E. J. Remann.	"	Machinery.	2	2	10	26	12	2 00	"	....
781	Philip Henkel.	"	Repairs.	2	2	10	26	12	2 00	"	....
782	The Stationer's Mfg. Co.	"	Wrappers.	10	10	10	26	10	90	Elec.	....
783	Neil McDermid.	"	Clothing.	3	3	10	26	12	1 67	None	....
784	F. J. Schwankovsky.	"	Repairs.	5	5	10	26	12	2 40	"	....
785	Detroit Photograph Co.	"	Frames.	3	3	10	26	12	1 67	"	....
786	Godfrey & Co.	"	Decorating.	25	15	9	26	12	2 00	"	....
787	The J. F. Hartz Co.	"	Surgic'l ins'ts.	4	4	10	26	12	2 75	"	....
788	E. F. & W. E. Metzger.	"	Repairs.	3	3	10	26	12	1 67	"	....
789	Gray & Baffy.	"	"	6	6	10	26	12	1 67	"	....
790	Andrew Hair.	"	Ice cream.	4	4	10	26	12	1 50	"	....
791	Rasch & Huebner.	"	Furs.	25	9	9	26	12	1 22	"	....
792	W. C. Rands & Co.	"	Repairs.	4	4	10	26	12	2 00	"	....
793	Wm. E. Metzger.	"	"	4	4	10	26	12	2 00	"	....
794	H. W. Becker.	"	Furs.	3	3	10	26	12	2 00	"	....
795	F. G. Barton & Co.	"	Fixtures.	4	4	10	26	12	1 75	"	....
796	C. M. Hayes & Co.	"	Photographs.	20	20	10	26	12	1 75	"	....
797	D. D. Spellman.	"	"	7	7	10	26	12	1 71	"	....
798	Leonard Laurence.	"	Moulding.	100	80	10	26	12	1 25	St'm.	No
799	Detroit Oak Belting Co.	"	Belting.	40	40	10	26	12	1 75	"	Yes
800	Peninsular Lead & Color Works.	"	Paints.	35	35	10	26	12	1 17	"	Yes

Inspection Book No. 17.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
801	W. H. McCausland & Son.....	Detroit.....	Job work.....	13	13	9	26 12	\$2 00	None	....	....
802	James E. Marentette.....	"	"	7	6	9	26 12	2 00	"	....	....
803	Globe Cash Register Co.....	"	Registers.....	55	50	9	26 12	1 60	St'm.	Yes	....
804	The W. H. Huss Co.....	"	Clothing.....	8	8	10	26 12	1 50	None	....	....
805	Seifred & Buhr.....	"	Doors, etc.....	3	3	8	26 12	2 00	"	....	....
806	John P. Schneider.....	"	Bicycles.....	5	5	10	26 10	2 00	"	....	....
807	Clarence H. Booth.....	"	Bath tubs.....	24	14	9	26 12	1 80	Elec.	....	....
808	Wm. Wright Co.....	"	Decorating.....	200	165	9	26 10	2 24	None	....	....
809	Whitney & Smith.....	"	"	27	27	9	26 8	2 25	"	....	....
810	Fleischmann & Co.....	"	Yeast.....	10	3	9	26 12	1 50	"	....	....
811	John Harpfer.....	"	Clothing.....	3	3	9	26 12	1 67	"	....	....
812	Geo. Harland Co.....	"	Printing.....	3	3	9	26 12	2 00	Elec.	....	....
813	Winn & Hammond.....	"	Printing, etc.....	125	100	9	26 12	1 25	S & E	Yes	....
814	Royal Manufacturing Co.....	"	Silverware.....	175	60	*	26 12	1 00	Elec.	....	....
815	Lindsay Hoky Poky Co.....	"	Ice cream.....	3	3	10	26 12	1 67	Gas..	....	....
816	The Detroit Free Press.....	"	Newspapers, etc.....	250	250	*24	26 12	2 00	S & E	Yes	....
817	The Claud Rodd Engraving Co.....	"	Photo-eng.....	4	4	9	26 12	1 75	Elec.	....	....
818	Detroit Photo-Engraving Co.....	"	"	5	4	9	26 12	2 25	"	....	....
819	Wm. Reid.....	"	Glass.....	30	30	9	26 12	1 89	None	....	....
820	Detroit Sanitary Supply Co.....	"	Supplies.....	85	53	10	26 12	2 00	Gas..	....	....
821	Chas. Wright & Co.....	"	Chemicals.....	100	60	10	26 12	1 25	None	....	....
822	Detroit Bronze and Plating Co.....	"	Plating.....	16	12	10	26 12	2 08	Gas..	....	....
823	A. Harvey's Sons Mfg. Co., Ltd.....	"	Supplies.....	65	65	10	26 12	2 00	St'm.	Yes	....
824	Detroit Popcorn Novelty Co.....	"	Popcorn.....	10	7	10	26 12	1 14	None	....	....
825	James Walker & Son.....	"	Supplies.....	65	65	10	26 12	2 70	St'm.	Yes	....
826	Michigan Bolt and Nut Works...	"	Bolts, etc.....	270	210	10	24 12	1 37	"	....	....
827	Gaylord Iron Co.....	"	Pig iron.....	60	30	*24	26 8	1 83	"	....	....
828	Benjamin Middleditch.....	"	Machinery.....	15	12	10	26 12	2 17	Gas..	....	....
829	The Cowles & Danziger Co.....	"	Barrels.....	10	3	10	26 12	2 00	Rent.	....	....
830	Detroit Edge Tool Co.....	"	Edge tools.....	16	13	10	26 12	1 54	St'm.	No	....
831	Currie & Conn.....	"	Paving bl'ks.....	20	20	*20	26 5	1 75	"	Yes	....
832	Detroit Heating & Lighting Co.....	"	Heaters.....	85	58	9	26 12	1 55	Rent.	....	....
833	A. M. Higgins.....	"	Baked goods.....	3	3	10	26 12	2 00	None	....	....
834	Nagel & Mohr.....	"	Blacksmith'g.....	4	4	10	26 12	2 25	"	....	....
835	Michigan Smelting & Ref. Co...	"	Metal.....	4	4	10	26 12	2 12	Elec.	....	....
836	Koppitz-Melchers Brewing Co.....	"	Beer.....	40	40	9	26 12	2 00	St'm.	No	....
837	A. Osibold & Co.....	"	Furniture.....	18	18	10	26 12	1 67	"	....	....
838	D. Meyers.....	"	"	2	2	10	26 12	2 00	Rent.	....	....
839	F. Degalan & Son.....	"	Turning.....	9	9	10	26 12	2 00	St'm.	No	....
840	Albert Schmidt.....	"	Macaroni.....	5	5	8	15 12	1 20	"	....	....
841	Michigan Lubricator Co.....	"	Brass goods.....	125	80	10	26 12	"	"	Yes	....
842	Joseph Mazer.....	"	Cigars.....	26	16	9	26 12	1 75	None	....	....
843	Ashbaugh, Dittrich & Co.....	"	Furs.....	25	15	9	26 12	1 67	"	....	....
844	Barney Nehls.....	"	Electro-plates.....	20	15	10	26 12	1 33	Gas..	....	....
845	Detroit Abend-Post.....	"	Newspapers, etc.....	28	28	7	*30 12	2 50	S & E	No	....
846	Hesch & Clarke.....	"	Artificial l'bs.....	10	9	10	26 12	2 00	Elec.	....	....
847	H. Lippold & Son.....	"	Dye'ng.....	12	8	10	26 12	1 87	St'm.	Yes	....
848	Wm. Deuter.....	"	Cloth. cleaned.....	3	3	10	26 12	1 67	None	....	....
849	Geo. J. Sexauer.....	"	Metal work.....	10	8	9	26 12	2 25	"	....	....
850	James Sluka.....	"	Clothing.....	3	3	10	26 12	1 67	"	....	....

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.
 • Not given.

Inspection Book No. 18.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
851	Sanger Bros.....	Detroit.....	Laundry.....	21	21	9 1/2	26 1/2	1	\$0 75	St'm.	No
852	Witchell, Son & Co., Ltd.....	"	Shoes.....	59	24	9	26 1/2	1	25	Gas.	....
853	E. S. Bryant Pattern Co.....	"	Patterns.....	20	20	10	26 1/2	2	50	"	....
854	Chas. E. Wain & Co.....	"	Machinery.....	10	8	10	26 1/2	2	00	"	....
855	Berry & Stelzer Pub. Co.....	"	Printing, etc.....	4	4	10	26 1/2	2	00	Rent	....
856	The Buick & Sherwood Mfg. Co.....	"	Plumbing.....	300	195	10	26 1/2	1	41	S & G	No
857	Buick & Sherwood.....	"	Bath tubs.....	60	8	10	26 1/2	1	87	Elec.	....
858	Wm. Shupe.....	"	Bread.....	6	6	10	26 1/2	2	33	Gas.	....
859	W. J. Burton & Co.....	"	Metal work.....	35	35	9	26 1/2	1	25	"	....
860	The Pen'r Emery Wheel Co.....	"	Emery wheels.....	8	8	10	26 1/2	1	62	St'm.	Yes
861	P. J. Hickey.....	"	Bl'ksmithing.....	2	2	9	26 1/2	2	50	None	....
862	Thomas Egan.....	"	".....	3	2	9	26 1/2	2	75	"	....
863	Wm. Fleming.....	"	".....	7	4	9	26 1/2	3	00	"	....
864	H. P. O'Connell.....	"	Jobbing.....	3	2	9	26 1/2	1	75	"	....
865	A. Fisher.....	"	Wagons, etc.....	23	23	10	26 1/2	1	41	Gas.	....
866	B. W. Marvin.....	"	Brass goods.....	3	3	10	26 1/2	2	33	Rent	....
867	Mitchell Bros.....	"	Feed.....	4	4	10	26 1/2	1	50	St'm.	Yes
868	J. L. Buechner.....	"	Plating.....	12	5	10	26 1/2	2	00	Rent	....
869	Geo. C. Hofman.....	"	Clothing.....	3	3	9	26 1/2	2	33	None	....
870	Wayne Hotel Laundry.....	"	Laundry.....	11	10	12	26 1/2	85	S & E	Yes	....
871	Am. Electrical Heater Co.....	"	Heaters.....	6	6	10	26 1/2	2	78	Elec.	....
872	P. J. Sands.....	"	Cigars.....	2	2	8	26 1/2	1	75	None	....
873	Hygela Filter Co.....	"	Filters.....	12	12	10	26 1/2	1	75	Gas.	....
874	Phelps, Brace & Co.....	"	Coffee, etc.....	19	19	9	26 1/2	1	25	"	....
875	The Prompt Press Printing Co.....	"	Printing.....	8	8	9	26 1/2	1	87	Elec.	....
876	Benjamin Guiney.....	"	Fittings.....	10	10	9	26 1/2	3	50	None	....
877	Day-Davis Mfg. Co.....	"	Bath tubs.....	5	4	8	26 1/2	3	00	Rent.	....
878	Keddy Grille Co.....	"	Grilles.....	3	3	10	26 1/2	2	00	St'm.	No
879	Detroit Stove Works.....	"	Stoves.....	1150	750	10	26 1/2	2	00	"	Yes
880	Standard Brass Works.....	"	Brass goods.....	45	25	10	26 1/2	1	50	None	....
881	C. Pfeiffer.....	"	Beer.....	20	20	9	26 1/2	2	00	St'm.	No
882	F. G. Johnston.....	"	Brass work.....	2	2	10	26 1/2	2	50	Rent	....
883	C. M. Smillie.....	"	Tools.....	3	3	10	26 1/2	2	00	"	....
884	Am. Paper Stock Co.....	"	Rags, etc.....	5	5	7	26 1/2	1	40	None	....
885	Frederick Stearns & Co.....	"	Medicine.....	400	306	9	26 1/2	77	St'm.	Yes	....
886	U. Armstrong & Co.....	"	Bldg. mat.....	25	25	9	26 1/2	2	00	Elec.	....
887	Geo. Norris & Co.....	"	Soft drinks.....	30	30	10	26 1/2	2	00	Gas.	....
888	The Murdock Valve Co.....	"	Valves, etc.....	9	9	10	26 1/2	2	00	St'm.	No
889	Wm. H. Mahs.....	"	Repairs.....	5	5	10	26 1/2	2	20	None	....
890	Columbian Cash Register Co.....	"	Registers.....	4	2	10	26 1/2	2	00	Elec.	....
891	Detroit Marble Works.....	"	Marble.....	12	12	9	26 1/2	2	00	Gas.	....
892	Det. Citizens' St. Ry. Rep'r shops	"	Repairs.....	275	275	10	26 1/2	1	48	S & E	No
893	Det. City Gas Co., Station B	"	Gas.....	42	42	24	30 1/2	1	48	St'm.	Yes
894	Michigan Ammonia Works.....	"	Ammonia.....	20	20	24	30 1/2	1	75	"	....
895	G. R. Jacob.....	"	Harnesses.....	2	2	10	26 1/2	1	50	None	....
896	F. Dingerman.....	"	Bldg. mat.....	9	9	9	26 1/2	1	88	St'm.	No
897	Alfred F. Mygard.....	"	Sculpture.....	3	3	9	26 1/2	2	00	None	....
898	Olds' Motor Works.....	"	Gas eng's, etc.....	165	165	10	26 1/2	1	25	Gas.	....
899	Chas. Manzmann.....	"	Brooms.....	24	20	10	26 1/2	1	75	"	....
900	Krentler Bros.....	"	Shoe lasts.....	29	29	10	26 1/2	1	58	St'm.	Yes

• Not given.

• Running 7 days per week.

• Running over 10 hours per day.

• Running day and night.

Inspection Book No. 19.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
901	F. M. Sibley Lumber Co.....	Detroit.....	Lumber.....	2	2	10	26	3	\$1 50	St'm.	No
902	Geo. Bartenbach.....	"	Metal.....	4	4	10	26	12	1 75	Gas..	....
903	August Freehauf.....	"	Blacksmith'g	2	2	10	26	12	2 00	None	....
904	Geo. E. Currie.....	"	Stone cutting	50	50	9	26	12	3 00	St'm.	No
905	Detroit Boat Works.....	"	Boats.....	100	22	10	26	12	2 00	"	"
906	Peninsular Iron Co.....	"	Pig iron.....	25	25	24	30	12	1 95	"	Yes
907	F. W. Wagner.....	"	Barrels.....	30	2	9	26	12	2 00	None	....
908	Detroit Furniture Mfg. Co.....	"	Furniture.....	19	19	10	26	12	1 58	St'm.	Yes
909	Michigan Handle Co.....	"	Handles.....	16	16	10	26	12	53	Rent.	....
910	Detroit Emery Wheel Co.....	"	Emery wheels	55	55	8	26	12	2 00	St'm.	Yes
911	Carl E. Schmidt.....	"	Skins.....	79	28	10	26	12	1 00	"	....
912	Ph. Kling Brewing Co.....	"	Beer.....	35	35	9	26	12	2 28	"	No
913	Washington Steam Laundry.....	"	Laundry.....	15	15	10	26	12	1 13	"	"
914	Am. Radiator Co., Detroit plant.	"	Radiators.....	512	512	10	26	12	1 56	"	"
915	W. Stonehouse.....	"	Blacksmith'g	3	2	9	26	12	2 25	None	....
916	F. Schmidt.....	"	Carpets.....	2	2	10	26	12	1 50	"	....
917	August Kade.....	"	Harnesses.....	3	2	10	26	12	2 00	"	....
918	San Telmo Cigar Co.....	"	Cigars.....	75	30	10	26	12	1 00	"	....
919	Tivoli Brewing Co.....	"	Beer.....	20	20	9	26	12	3 00	St'm.	No
920	Detroit Split Wood Pulley Co.....	"	Pulleys.....	14	14	10	26	12	1 36	"	"
921	American Casket Co.....	"	Caskets.....	12	12	10	26	12	1 08	"	"
922	H. E. Hinz.....	"	Cigars.....	2	2	8	26	12	2 10	None	....
923	City Steam Bakery.....	"	Baked goods	4	3	10	26	12	2 00	Gas..	....
924	U. S. Chemico-Wood Co.....	"	Handles.....	80	34	10	26	12	1 55	St'm.	Yes
925	Michigan Yacht & Power Co.....	"	Boats.....	60	25	10	26	7	2 10	"	"
926	The Anderson-Wales Pulley Co..	"	Pulleys.....	15	15	10	26	12	1 33	"	No
927	Theo. Funke.....	"	Cigars.....	3	3	8	26	12	2 00	None	....
928	Excelsior Steam Bakery.....	"	Baked goods.	3	3	10	26	12	2 00	"	....
929	Detroit Enamelling Co.....	"	Bicycles.....	4	3	10	26	12	2 00	"	....
930	Enterprise Foundry Co.....	"	Castings.....	35	35	10	26	12	2 00	St'm.	No
931	Detroit Water Wks., Pump Sta..	"	Water.....	29	29	24	30	12	2 03	"	Yes
932	Aug. G. Lamberg & Co.....	"	Cigars.....	11	10	8	26	12	1 50	None	....
933	Schweikartz Boat Works.....	"	Boats.....	10	5	10	26	12	2 40	St'm.	No
934	Louis H. Lempke.....	"	Decorating.....	4	4	10	26	12	2 25	None	....
935	Pioneer Glass & Novelty Co.....	"	Reed work.....	60	51	8 1/2	26	12	1 27	St'm.	Yes
936	Acme Fancy Wire Works.....	"	Wire goods..	11	11	10	26	12	91	Gas..	....
937	F. E. Thompson & Co.....	"	Drugs.....	10	10	9 1/2	26	12	1 60	St'm.	Yes
938	Herman Peck.....	"	Clothing.....	7	7	10	26	12	1 43	None	....
939	John F. Briskey.....	"	Cigars.....	4	4	8	26	12	1 45	"	....
940	Detroit Gal. & Sheet Metal Wks.	"	Castings.....	70	70	10	26	6	1 84	St'm.	Yes
941	J. George Unsold.....	"	Blacksmith'g	4	4	10	26	12	2 00	None	....
942	H. Gutow.....	"	Arches.....	4	3	9	26	12	1 67	"	....
943	Frederick Weber.....	"	Baked goods.	3	3	10	26	12	2 00	"	....
944	White Eagle Tobacco Works.....	"	Cigars, etc..	5	3	10	26	12	1 67	St'm.	No
945	The Norris Co.....	"	Collars, etc..	60	60	9	26	12	1 00	"	"
946	The Norris Co.....	"	Laundry.....	40	40	9	26	12	1 00	"	"
947	The Hoefler Bicycle Mfg. Co.....	"	Bicycles.....	5	3	10	26	12	2 33	Gas..	....
948	Samuel Graham.....	"	Plumbing, etc	5	3	9	26	12	3 00	None	....
949	W. H. Rowe.....	"	Printing.....	12	5	9	26	12	1 60	Gas..	....
950	J. M. Pottichke.....	"	Clothing.....	12	7	10	26	12	1 43	None	....

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 20.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
951	M. Reichstein	Detroit.....	Rags.....	12	6	7	20	12	\$0 83	None	....
952	H. W. Rickel.....	"	Malt.....	7	7	24	30	12	1 43	St'm.	No
953	J. B. Cowhey.....	"	Blacksmith'g	6	4	9	26	12	2 50	None	....
954	A. H. Rose.....	"	Jobbing.....	10	8	9	26	12	2 25	"	....
955	John P. Schneider.....	"	Bicycles.....	6	4	10	26	12	1 50	"	....
956	John Mayer.....	"	Baked goods.	9	9	10	26	12	2 00	"	....
957	U. S. Laundry.....	"	Laundry.....	7	6	10	26	12	75	Hand	....
958	Wm. Heinbuch.....	"	Cigars.....	14	14	8	26	12	1 50	None	....
959	Detroit White Lead Works	"	Paints, etc.....	150	125	10	26	12	2 00	St'm.	Yes
960	I. Temerowski.....	"	Baked goods.	6	6	8	26	12	2 00	None	....
961	H. Hoffman	"	"	4	4	10	26	12	2 00	Gas..	....
962	Detroit Brewing Co.....	"	Beer.....	30	30	9	26	12	2 33	St'm.	Yes
963	Joseph A. Schneider	"	Clothing	4	3	10	26	12	1 67	None	....
964	Speck Bros.....	"	Furniture.....	8	8	10	26	12	2 25	"	....
965	Mathes Bros.....	"	Wagons.....	7	7	10	26	12	2 00	"	....
966	Anton Hupprich.....	"	Flower pots..	7	7	10	26	12	1 43	St'm.	Yes
967	A. F. McLaren Imp. Cheese Co..	"	Cheese.....	20	14	10	26	12	1 00	Elec.	....
968	Modern Match Co.....	"	Matches.....	160	160	10	26	12	88	St'm.	No
969	White Eagle Brewery.....	"	Beer.....	15	15	9	26	12	2 67	"	Yes
970	The Eckhard & Becker Brew. Co.	"	"	31	31	9	26	12	2 26	"	....
971	Wm. Wilson.....	"	Blacksmith'g	3	2	9	26	12	3 00	None	....
972	B. J. Fafeyta.....	"	Clothing	2	2	10	26	12	1 75	"	....
973	Philip Drinkaus.....	"	Moulding	8	8	10	26	12	1 50	"	....
974	T. M. Modlinski.....	"	Baked goods.	3	3	10	26	12	1 67	"	....
975	Champion Brewery.....	"	Beer.....	11	11	9	26	12	2 30	St'm.	No
976	Leland & Falconer Mfg. Co.....	"	Machinery.....	251	180	10	26	12	1 79	"	"
977	W. S. Piggins.....	"	Cut stone.....	25	14	8	26	9	3 93	"	"
978	B. Lemke.....	"	Printing.....	3	3	10	26	12	1 67	Gas..	....
979	T. Sochalski.....	"	Blacksmith'g	3	3	10	26	12	2 00	None	....
980	Jos. Freda.....	"	"	3	3	10	26	12	2 00	"	....
981	Polonia Publishing Co.....	"	Printing.....	3	3	9	26	12	1 00	"	....
982	H. Japes & Co.....	"	Sash, etc.....	20	18	9	26	12	2 00	St'm.	No
983	Detroit Valve & Washer Co.....	"	Specialties.....	45	45	10	26	12	67	Gas..	....
984	F. B. Whittelsberger.....	"	Bread, etc.....	20	20	9	26	12	1 50	"	....
985	Jos. Roeber.....	"	Cut stone.....	7	3	8	26	1	2 33	None	....
986	A. Erschig.....	"	Wagons.....	4	4	10	26	12	1 75	"	"
987	Cut Rate Carpet Clean. Works..	"	Carpets.....	6	6	10	26	12	1 83	Gas..	....
988	J. Steyskal.....	"	Clothing	4	2	9	26	12	1 50	None	....
989	John E. Smith.....	"	Cut stone.....	20	10	8	26	8	2 50	"	....
990	Thomas A. Jones.....	"	Cigars.....	15	15	8	26	12	1 20	"	....
991	Schwanbek Bros.....	"	Mouldings	70	50	10	26	12	1 50	St'm.	No
992	Charles Hilbert.....	"	Harnesses.....	3	2	10	26	12	2 00	None	....
993	Charles Rohde.....	"	Wagons.....	14	10	10	26	12	2 00	Gas..	....
994	Detroit House of Correction.....	"	Chairs, etc.....	509	397	10	26	12	x	St'm.	No
995	R. Rutledge.....	"	Machines.....	3	2	9	26	12	1 50	Rent.	....
996	H. & A. Lauboff.....	"	Flour.....	5	5	10	26	12	1 00	St'm.	No
997	J. H. Stewart.....	"	Blacksmith'g	3	3	9	26	12	2 33	None	....
998	John Brennan & Co.....	"	Boilers.....	200	185	10	26	12	1 11	St'm.	No
999	Alols Bialk.....	"	Blacksmith'g	2	2	10	26	12	2 00	None	....
1000	Chas. F. Graulich.....	"	Harnesses.....	3	2	10	26	12	2 00	"	....

• Running day and night.
 ° Running 7 days per week.
 * Penal institution.

Inspection Book No. 21.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1001	St. Claire Manufacturing Co.....	Detroit.....	Wrappers, etc	275	175	9	26	12	\$0 91	Rent.	....
1002	John Proma.....	"	Clothing.....	10	6	10	26	12	1 00	None	....
1003	The Eagle Press.....	"	Printing.....	3	3	10	36	12	1 67	Gas.	....
1004	The Posselius Bros' Furn. Mfg. Co	"	Furniture.....	125	110	8	26	12	1 23	St'm.	Yes
1005	St. Claire Manufacturing Co.....	"	Waists, etc....	10	10	9	26	12	2 50	None	....
1006	J. E. Bolles Iron & Wire Works..	"	Iron work.....	30	23	9	26	12	2 00	Rent.	....
1007	Novelty Knitting Co.....	"	Knit goods.....	150	70	9	26	12	50 "	"	....
1008	J. D. Mouat.....	"	Supplies.....	10	10	9	26	12	2 00	"	....
1009	Art Brass & Wire Works.....	"	Brass wk., etc	32	32	9	26	12	2 00	"	....
1010	Marcus & Laing.....	"	Bldg. mat.....	24	17	9	26	8	1 48	St'm.	Yes
1011	Murphy, Wasey & Co.....	"	Chairs.....	475	390	10	26	11	1 67	"	....
1012	John Frey.....	"	Bicycles.....	3	3	10	26	12	1 33	None	....
1013	Guliloz & Son.....	"	Baked goods.....	7	7	10	26	12	1 50	"	....
1014	English Bros.....	"	Plumbing.....	5	5	10	26	12	2 00	"	....
1015	Fred Rorabeck & Co.....	"	Wagons.....	3	3	10	26	12	2 00	"	....
1016	Mahoney Bros.....	"	Plumbing.....	5	4	10	26	12	2 00	"	....
1017	W. Ingram.....	"	Baked goods.....	4	3	10	26	12	2 00	"	....
1018	Frank Deck.....	"	Clothing.....	5	4	10	26	12	1 25	"	....
1019	Charles P. Rohlman.....	"	Blacksmith'g	3	3	9	26	12	2 67	"	....
1020	Lane Bros.....	"	Plumbing.....	30	18	9	26	12	1 57	"	....
1021	Detroit Glove Works.....	"	Gloves.....	7	7	10	26	12	75	Elec.	....
1022	Am. Radiator Co., Mich. plant..	"	Bollers.....	400	350	10	25	12	1 51	St'm.	Yes
1023	Leo Temeroski.....	"	Baked goods.....	2	2	10	26	12	2 00	None	....
1024	The Robert Keller Ink Co.....	"	Ink.....	3	3	9	26	12	1 00	"	....
1025	L. W. Humphrey.....	"	Baked goods.....	5	4	10	26	12	1 75	"	....
1026	E. B. Mynick.....	"	Cigars.....	10	10	8	26	12	1 50	"	....
1027	William A. Ross.....	"	Furniture.....	4	4	10	26	12	88 "	"	....
1028	American Blower Co.....	"	Exhaust fans	150	147	10	26	12	1 36	St'm.	Yes
1029	J. H. Robertson.....	"	Overalls.....	5	5	8	26	12	75	Elec.	....
1030	Styles Bakery.....	"	Baked goods.....	4	3	10	26	12	1 67	None	....
1031	F. Wittelsberger & Co.....	"	"	15	15	10	26	12	2 00	St'm.	Yes
1032	Brown Bros. Co.....	"	Strip tobacco	70	50	9	26	12	60	None	....
1033	Detroit Can Co.....	"	Tin cans.....	150	75	10	26	12	1 33	St'm.	No
1034	A. A. Huperz.....	"	Cigars.....	3	2	8	26	12	1 00	None	....
1035	Goodwin Bakery.....	"	Baked goods.....	4	4	10	26	12	1 75	"	....
1036	McGowan Bros.....	"	Laundry.....	11	11	9	26	12	1 00	St'm.	Yes
1037	Det. Board Pub. Works, E. yard.	"	Paving blocks	35	35	8	26	7	1 50	"	....
1038	Hoyt's Steam Laundry.....	"	Laundry.....	38	36	10	26	12	1 00	"	....
1039	H. Nagle.....	"	Iron work.....	3	3	10	26	12	1 33	None	....
1040	Star Steam Laundry.....	"	Laundry.....	7	7	10	26	12	61	St'm.	No
1041	Detroit Mirror Works.....	"	Mirrors.....	10	10	10	26	12	1 00	Rent.	....
1042	T. J. Irwin.....	"	Candles.....	20	20	10	26	12	1 00	St'm.	No
1043	Burrows Yeast Co.....	"	Yeast.....	23	23	10	26	12	96 "	"	Yes
1044	Det. Manufacturing Novelty Co.	"	Spring beds..	15	10	10	26	12	1 50	"	No
1045	Western Robe Co.....	"	Robes.....	40	39	10	26	12	90 "	"	....
1046	Detroit Register Co.....	"	Registers.....	18	18	10	26	12	1 38	"	Yes
1047	Michigan Heater Co.....	"	Heaters.....	72	72	10	26	12	2 67	"	No
1048	Detroit Excelsior Works.....	"	Excelsior.....	15	15	10	26	10	1 20	"	....
1049	Craddock Manufacturing Co.....	"	Boxes.....	65	65	10	26	12	92 "	"	....
1050	Standard Can Co.....	"	Tin cans.....	18	4	10	26	10	1 75	Gas.	....

Inspection Book No. 23.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1061	Chas. Pregitzer.....	Detroit....	Baked goods.	4	3	10	26 12		\$1 67	None	....
1062	C. D. Widman & Co.....	"	Furniture, etc.	85	85	10	26 12		1 18	St'm.	No
1063	Art Stove Co.....	"	Stoves.....	170	170	10	26 12		1 71	"	"
1064	The Fuller Co.....	"	Machinery...	34	34	10	26 12		2 06	"	Yes
1065	Robert Morris.....	"	Cots.....	4	4	10	26 3		1 25	None	....
1066	Becker & Mohan.....	"	Repairs.....	4	4	10	26 12		2 00	"	....
1067	J. J. Geir & Co.....	"	Sash, etc.....	7	7	9	26 10		1 71	St'm.	No
1068	Chas. Berkholz.....	"	Baskets.....	3	3	10	26 12		1 00	None	....
1069	A. Luterma.....	"	Tailoring.....	7	5	10	26 12		1 40	"	....
1060	Chas. Goldner.....	"	Wagons, etc....	15	9	9 1/2	26 12		2 19	"	....
1061	J. M. McKerchey.....	"	Plumbing.....	15	9	9 1/2	26 12		2 19	"	....
1062	Joseph Kryda.....	"	Clothing.....	7	5	9	26 12		1 50	"	....
1063	Casper J. Brinkmann.....	"	Bicycles.....	5	3	10	26 12		1 67	St'm.	No
1064	Isadore Gottfield.....	"	Stove pipe etc.	5	5	10	26 12		1 80	None	....
1065	Hughes & Sarjeant.....	"	Photographs....	19	19	9	26 12		1 00	"	....
1066	J. S. Stewart.....	"	Printing.....	3	2	9 1/2	26 12		1 00	Gas.	....
1067	Detroit Oar Works.....	"	Oars, etc.....	12	10	10	26 12		1 50	St'm.	Yes
1068	J. C. Wilson Carriage Co.....	"	Wagons, etc....	15	10	10	26 12		2 00	None	....
1069	Detroit Casket Co.....	"	Caskets.....	60	60	10	26 12		1 50	St'm.	Yes
1070	Det. Lead Pipe & Sheet Iron Wks	"	Pipe, etc.....	20	20	10	26 12		2 25	"	No
1071	Fisher Electric Works.....	"	Electricity....	30	7	10	26 12		2 00	"	Yes
1072	Detroit Waste Works.....	"	Cotton waste....	4	4	10	26 12		1 75	Gas.	....
1073	City Coffee and Spice Mills.....	"	Coffee, etc.....	6	6	10	26 12		2 00	St'm.	No
1074	Central Boiler Works.....	"	Boilers.....	38	38	10	26 10		2 00	"	Yes
1075	Keller & Co.....	"	Ink, etc.....	2	2	10	26 12		2 00	None	....
1076	Wayne Carpet Cleaning Works..	"	Carpets.....	3	3	10	26 1		1 67	"	....
1077	Detroit Cabinet Co.....	"	Furniture.....	100	73	10	26 12		1 37	St'm.	No
1078	Clayton & Lambert Mfg. Co.....	"	Fire pots.....	30	23	10	26 12		1 65	Gas.	....
1079	The Anderson Carriage Co.....	"	Carriages.....	175	100	10	24 12		2 00	St'm.	Yes
1080	Detroit Carriage & Mfg. Co.....	"	".....	80	26	10	26 12		2 50	"	No
1081	Acme White Lead & Color Wks.	"	Paints, etc....	200	200	10	26 12		1 00	"	"
1082	American Junk Co.....	"	Rags.....	18	16	8	22 12		75	None	....
1083	Smallnsky & Robinson.....	"	".....	13	13	7	22 12		70	"	....
1084	Smallnsky & Robinson.....	"	".....	30	25	7	22 12		68	"	....
1085	M. Shifman.....	"	".....	10	9	7	22 12		67	"	....
1086	John Hoffman.....	"	Barrels.....	8	8	10	26 12		1 89	"	....
1087	John Scheu.....	"	Soft drinks....	3	3	10	26 12		1 67	"	....
1088	Phillip Hildebrand.....	"	Rags.....	12	12	8 1/2	26 12		83	"	....
1089	L. Luthermoser.....	"	Clothing.....	15	15	10	26 12		1 00	"	....
1090	Michigan Wire Cloth Co.....	"	Wire cloth.....	210	128	10	21 12		1 56	St'm.	Yes
1091	Caughey & Carran.....	"	Grain.....	8	8	10	26 12		1 75	"	"
1092	Detroit Flower Pot Co.....	"	Flower pots....	15	15	8	26 12		1 60	Elec.	....
1093	Lichtenberg & Son.....	"	Feed, etc.....	3	3	10	26 12		1 25	St'm.	Yes
1094	J. B. Wilson & Co.....	"	Castings.....	30	30	10	26 12		2 00	S & G	"
1095	Hees, Macfarlan & Co.....	"	Shades.....	45	25	9 1/2	21 12		1 55	"	"
1096	Canada Malt Co.....	"	Malt.....	10	4	10	26 8		1 75	St'm.	"
1097	Mutual Brewing Co.....	"	Beer.....	5	5	9	26 12		2 25	"	No
1098	Geo. Moebis & Co.....	"	Cigars.....	148	148	9	24 12		97	None	....
1099	National Brewery Co.....	"	Beer.....	9	9	9	26 12		2 22	St'm.	No
1100	A. F. Seidel.....	"	Baked goods....	4	4	10	26 12		1 75	None	....

Inspection Book No. 23.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1101	A. J. Hardenburg	Detroit....	Repairs.....	8	8	10	26	12	\$1 37	None	....
1102	R. Robertson & Co.....	"	Cut stone.....	50	24	9	26	12	2 71	St'm.	Yes
1103	Jenks & Muir Mfg. Co.....	"	Iron beds.....	150	150	10	26	12	1 47	"	"
1104	Fox Bros. & Co.....	"	Wood mantel.....	40	36	10	26	12	1 67	"	"
1106	Alexander Gordon	"	Tobacco.....	35	35	10	26	9	43	None	....
1106	A. C. Wollenzin	"	Baked goods.....	4	4	10	26	12	1 75	"	....
1107	Bernard Schwartz.....	"	Cigars.....	4	4	8	26	12	1 75	"	....
1108	Moses Rosenzweig.....	"	Rags.....	15	13	7	22	12	54	"	....
1109	Wm. Maier & Co.....	"	Pretzels.....	3	3	10	26	12	1 67	"	....
1110	M. Reutter & Son.....	"	Bottled beer.....	4	4	10	26	12	1 75	"	....
1111	Spitzley Bros.....	"	Bldg. mater'l.....	25	25	9	26	12	2 00	St'm.	No
1112	American Harrow Co.....	"	Harrows.....	90	80	10	26	12	1 56	"	Yes
1113	Buhl Stamping Co.....	"	Tinware.....	200	150	10	26	12	77	"	....
1114	Detroit Stay Co.....	"	Stays.....	50	50	9	26	8	75	Gas..	....
1115	Neil Smith.....	"	Blacksmith'g.....	3	3	9	26	12	3 00	None	....
1116	J. Beck & Son.....	"	Cornmeal, etc.....	25	22	10	26	12	1 66	St'm.	Yes
1117	Detroit Meter Co.....	"	Gas meters.....	25	15	10	26	12	1 75	Rent.	....
1118	Frank J. Jominy.....	"	Dyed goods.....	3	3	10	26	12	1 67	None	....
1119	The Caille Scheimer Co.....	"	Machines.....	100	80	10	26	12	1 50	Rent.	....
1120	A. Stafford.....	"	Blacksmith'g.....	3	3	9	26	12	2 33	None	....
1121	Johnson Carriage Co.....	"	Carriages.....	10	8	10	26	12	1 88	"	....
1122	H. Cornehl.....	"	Blacksmith'g.....	3	3	9	26	12	2 67	"	....
1123	Wm. McCarty.....	"	".....	2	2	9	26	12	2 50	"	....
1124	Wm. J. Chiera.....	"	Laundry.....	5	4	10	26	12	1 25	"	....
1125	The Hexagon Air Rifle Co.....	"	Air rifles.....	12	4	10	26	5	1 75	Elec.	....
1126	Wheeler Mfg. Co.....	"	Bicycle sad'l's.....	35	12	10	26	12	1 67	"	....
1127	F. W. Olds & Co.....	"	Laundry.....	15	15	10	26	12	1 00	St'm.	Yes
1128	Monarch Laundry.....	"	".....	20	20	10	26	12	1 00	"	....
1129	Detroit Clothing Care Co.....	"	Clothing.....	4	4	10	26	12	1 25	None	....
1130	Max Grabowsky.....	"	Lock repairs.....	4	4	10	26	12	1 50	Gas..	....
1131	Wagner Baking Co.....	"	Baked goods.....	5	5	10	26	12	2 00	None	....
1132	A. Peters.....	"	Dyed ".....	7	7	10	26	12	1 43	St'm.	Yes
1133	Bock's Home Bakery.....	"	Baked ".....	3	3	10	26	12	2 00	None	....
1134	A. F. Amsbary.....	"	Cleaned ".....	5	4	10	26	12	1 50	"	....
1135	Geo. Hilsendegen.....	"	Repairs.....	4	4	10	26	12	1 75	"	....
1136	James Roach.....	"	Decorating.....	30	30	9	26	12	1 67	"	....
1137	A. Wood & Co.....	"	Baked goods.....	4	4	10	26	12	1 75	"	....
1138	M. Leuhoff.....	"	Clothing.....	10	8	10	26	12	1 94	"	....
1139	J. S. Shipley & Co.....	"	Upholstering.....	7	7	10	26	12	1 43	"	....
1140	Det. Galviniz'g & Sheet Met. Wks	"	Stoves, etc.....	100	50	10	26	12	1 00	Rent.	....
1141	The Wolverine Reed Co.....	"	Reed chairs.....	80	65	10	26	12	77	Elec.	....
1142	Detroit Automobile Co.....	"	Automobiles.....	30	5	10	26	12	2 00	St'm.	No
1143	Geo. Kelley.....	"	Cloth. clean'd.....	13	10	10	26	12	1 31	None	....
1144	A. Goldman.....	"	Scrap iron.....	4	4	10	22	12	1 50	"	....
1145	H. George & Son.....	"	Bldg. mater'l.....	100	50	9	26	12	2 50	St'm.	No
1146	J. Barnett.....	"	Clothing.....	6	4	10	26	12	1 00	None	....
1147	S. Partrite.....	"	".....	12	9	10	26	12	1 00	Elec.	....
1148	M. Harris.....	"	".....	14	14	10	26	12	80	"	....
1149	B. Ferris.....	"	Paper.....	10	10	7	26	12	80	None	....
1150	Warren Capsule Co.....	"	Capsules.....	50	50	10	26	9	•	Gas..	....

• Not given.

Inspection Book No. 24.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1151	West Side Brewery Co.....	Detroit.....	Beer.....	8	8	9	26	12	\$2 00	Rent.....	Yes
1152	West Side Brewery Co.....	"	"	20	20	9	26	12	1 50	St'm.	Yes
1153	S. Flannery & Co.....	"	Blacksmith'g	3	2	9	26	12	2 00	None	.....
1154	Ersler & Co.....	"	Wagons.....	12	8	10	26	12	2 00	"	.....
1155	Commercial Papier-Mache Co....	"	Papier mache	40	22	9	26	12	68	"	.....
1156	Detroit Graphite Mfg. Co.....	"	Paint.....	25	25	10	26	12	1 66	S & E	Yes
1157	The Scotten Tobacco Co.....	"	Tobacco.....	70	70	10	26	12	1 43	St'm.	.....
1158	Philip Christa & Son.....	"	Marble.....	38	18	10	26	12	2 00	"	.....
1159	Chas. Pohlman & Co.....	"	Furniture.....	55	55	10	26	12	1 20	"	No
1160	A. Backus Jr., & Sons.....	"	Boxes, etc.....	48	48	10	26	12	1 04	"	Yes
1161	M. C. R. R. Elevator Co.....	"	Grain.....	15	10	10	26	12	1 75	"	.....
1162	M. C. R. R. Elevator Co., House H.	"	"	14	12	10	26	12	1 75	"	.....
1163	Union Elevator Co.....	"	"	50	12	9	26	12	1 75	"	.....
1164	The Park & McKay Co.....	"	Brass goods..	50	22	10	26	12	2 28	Elec.	.....
1165	Bray Bros.....	"	Wagons.....	25	18	10	26	12	1 78	Rent.....	.....
1166	Crescent Machine Co.....	"	Machinery.....	40	26	10	26	12	1 42	St'm.	Yes
1167	Teakle & Golden.....	"	Bld'g mater'l.	12	8	9	20	12	2 00	Gas..	.....
1168	Det. St'm Carpet Cleaning W'ks.	"	Carpets.....	35	12	10	26	12	1 33	St'm.	Yes
1169	Richard Helson.....	"	Bld'g mater'l.	12	2	9	26	12	2 00	None	.....
1170	Cooper Handle Bar Co.....	"	Handle bars..	15	2	10	26	12	2 00	Gas..	.....
1171	Ladies' Hand Laundry.....	"	Laundry.....	5	3	10	26	5	1 00	None	.....
1172	Sian Laundering Co.....	"	"	41	41	10	26	12	93	St'm.	No
1173	H. Harris.....	"	Clothing.....	4	4	10	26	12	1 50	None	.....
1174	Peddle & McCosh.....	"	"	4	4	10	26	12	1 50	"	.....
1175	J. Fred Jennings.....	"	"	5	5	10	26	12	1 80	"	.....
1176	G. E. Cutler.....	"	Repairs.....	3	3	10	26	12	1 00	"	.....
1177	Michigan Telephone Co.....	"	Tel. goods.....	75	75	9	26	12	1 35	Elec.	.....
1178	The Voigt Brewing Co.....	"	Beer.....	45	45	9	26	12	1 90	St'm.	Yes
1179	Excelsior Laundry.....	"	Laundry.....	10	10	10	26	12	1 00	"	No
1180	Michigan Optical Co.....	"	Spectacles.....	119	119	10	26	12	88	Gas..	.....
1181	W. A. Sturgeon & Co.....	"	Jewelry.....	15	15	9	26	12	2 68	"	.....
1182	Newton Annis.....	"	Furs.....	250	250	9	26	12	1 00	Elec.	.....
1183	Peninsular Stove Co.....	"	Stoves.....	800	800	10	26	11	2 00	S & G	Yes
1184	Diamond Match Co.....	"	Matches.....	500	437	10	26	12	89	St'm.	.....
1185	Hamilton, Carhartt & Co.....	"	Clothing.....	535	535	9	26	12	93	Gas..	.....
1186	John Whittaker.....	"	Contracting..	30	30	9	16	12	2 00	"	.....
1187	Mannausa & Wieber.....	"	Printing.....	12	10	9	26	12	1 50	Rent.....	.....
1188	Frederick F. Ingram.....	"	Chemicals.....	50	40	10	26	12	1 12	St'm.	Yes
1189	Guyette & Co.....	"	Soft drinks..	8	4	10	26	12	1 75	Gas..	.....
1190	Morton Baking Co.....	"	Baked goods..	40	40	10	26	12	1 62	St'm.	Yes
1191	Board of Education Repair Shop.	"	Repairs.....	90	20	8	26	12	2 00	None	.....
1192	Ray Chemical Co.....	"	Chemicals.....	25	15	10	26	12	1 70	St'm.	No
1193	Uter & Eansor.....	"	Wagons.....	10	8	10	26	12	2 50	None	.....
1194	The Avenue Bakery.....	"	Baked goods..	7	6	9	26	12	1 54	"	.....
1195	J. E. Brill.....	"	"	4	4	10	26	12	2 00	"	.....
1196	Beers Bakery.....	"	"	3	3	10	26	12	1 67	"	.....
1197	Detroit Steam Laundry.....	"	Laundry.....	8	8	10	26	12	1 25	St'm.	No
1198	Gargill & Co.....	"	Baked goods..	3	3	10	26	12	1 67	None	.....
1199	Hertz & Hosback Co.....	"	Sash, etc.....	45	42	9	26	12	1 60	St'm.	No
1200	Howie Roofing Co.....	"	Metal work..	25	25	9	26	12	1 80	None	.....

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1201	Hoskins' Laundry Co.	Detroit	Laundry	20	15	10	26	12	\$1 13	St'm.	No
1202	Day Metallic Manufacturing Co.	"	Bath tubs, etc	15	15	10	26	12	1 50	"	"
1203	Zacharias & Mason	"	Shirtwaists	250	75	10	26	11	1 80	Gas.	"
1204	Michlgan Paste & Mfg. Co.	"	Paste	3	3	10	26	12	1 67	St'm.	Yes
1205	Detroit Fibre Frame Co.	"	Frames	65	65	10	26	6	1 23	Rent.	"
1206	Clerihues' Bakery	"	Baked goods	5	5	10	26	12	1 40	None	"
1207	W. M. Walker	"	Ice cream, etc	5	6	10	26	12	1 50	Gas.	"
1208	R. J. McClellan	"	Blacksmith'g	3	3	9	26	12	2 67	None	"
1209	P. Bingham & Co.	"	Bicycles	3	3	10	26	12	2 33	"	"
1210	Humphry's Bakery	"	Baked goods	3	3	10	26	12	2 33	"	"
1211	Wagner Baking Co.	"	"	40	40	9	26	12	2 25	St'm.	Yes
1212	Detroit Brass Works	"	Brass goods	71	57	10	26	12	1 37	"	No
1213	John J. Owen	"	Parquetry	4	4	10	26	12	1 75	None	"
1214	Nicholson Manufacturing Co.	"	Building mat.	20	15	9	26	12	2 00	St'm.	Yes
1215	C. H. Haberkorn & Co.	"	Furniture	125	105	10	26	12	1 43	"	No
1216	Delbridge & Cameron Co.	"	Sash, etc.	25	22	9	26	11	1 81	"	Yes
1217	A. B. Degalan	"	Wood turn'g.	5	5	10	26	12	1 60	"	No
1218	Granville Wood & Son	"	Pipe organs	6	6	10	26	1	1 83	Rent.	"
1219	De Man Bros	"	Sash, etc.	35	27	9	26	12	1 85	St'm.	No
1220	Ferris & Habermas	"	Blacksmith'g	4	4	9	26	12	2 50	None	"
1221	Anchor Steam Laundry	"	Laundry	12	12	10	26	12	1 00	St'm.	No
1222	J. W. Whiting	"	Wagons	4	4	9	26	12	2 50	None	"
1223	L. Crabb & Son	"	Brooms, etc.	50	50	10	26	12	1 00	Gas.	"
1224	Dearing Water Tube Boiler Co.	"	Boilers	20	10	10	26	12	1 50	St'm.	No
1225	R. Allen	"	Hair goods	6	6	10	26	12	1 34	None	"
1226	Detroit Riker Automobile Co.	"	Bicycle rep.	4	4	10	26	12	1 75	"	"
1227	Mme. Davis	"	Hair goods	4	4	10	26	12	1 50	"	"
1228	A. Roemer	"	Cigars	4	4	8	26	12	2 00	"	"
1229	Theo. C. Man	"	Furs	5	5	10	26	12	1 80	"	"
1230	Detroit Lubricator Co.	"	Brass goods	200	135	10	26	12	1 63	St'm.	Yes
1231	Wolverine Manufacturing Co.	"	Furniture	350	300	10	26	12	1 08	"	"
1232	The Hugo Hill Co.	"	Millinery	15	15	10	26	12	1 67	None	"
1233	Keenan & Jahn	"	Furniture	20	18	10	26	12	1 67	"	"
1234	Farrand & Votey Organ Co.	"	Organs	225	200	10	26	12	2 00	St'm.	Yes
1235	The Laundry	"	Laundry	22	22	10	26	12	91	"	"
1236	Robert Zinober	"	Furs	4	2	10	26	12	1 50	None	"
1237	C. L. Major & Co.	"	Buttons	3	3	10	26	12	1 67	"	"
1238	J. H. A. Haberkorn	"	Sash, etc.	35	8	9	26	12	2 00	Gas.	"
1239	London Steam Laundry	"	Laundry	12	12	9	26	12	1 00	St'm.	No
1240	Eagle Cornice Works	"	Iron work	6	6	10	26	12	2 16	None	"
1241	T. H. Johnson	"	Table saucers	4	4	10	26	12	1 75	St'm.	Yes
1242	Max Redelsheimer	"	Optical goods	3	3	10	26	12	2 67	None	"
1243	William Stoup	"	Millinery	10	8	10	26	12	50	"	"
1244	The Photochromo Co.	"	Pictures	50	50	9	26	12	1 00	Gas.	"
1245	Parson & Hobart	"	Feed	4	4	10	26	12	1 75	St'm.	Yes
1246	Oriental Rug Repair Co.	"	Repairs	4	4	10	26	12	2 00	None	"
1247	E. G. Dailey Co.	"	Preserves	175	150	10	26	12	81	St'm.	No
1248	H. R. Leonard	"	Furniture	15	15	10	26	12	1 86	None	"
1249	American Malting Co.	"	Malt, etc.	17	17	24	28	12	1 76	St'm.	No
1250	Williams Bros. & Charbonneau	"	Preserves	500	500	10	26	12	1 00	"	"

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 26.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1251	Western Carpet Cleaning Works	Detroit.....	Cleaning.....	9	2	10	26	12	\$2 00	St'm.	No
1252	J. Debele & Son.....	"	Flour.....	5	5	9	26	12	2 60	"	Yes
1253	Union Depot Elevator.....	"	Grain.....	10	8	10	26	12	1 88	"	"
1254	W. S. Booth & Co.....	"	Columns.....	10	9	10	26	8	1 44	Rent.	"
1255	Ed. Frohlich Glass Co.....	"	Woodwork.....	35	25	10	26	5	2 00	St'm.	No
1256	Winn & O'Connell.....	"	Blacksmith'g.....	4	4	9	26	12	3 75	None	"
1257	David Stott Flour Mill.....	"	Flour.....	46	46	24	26	12	1 52	St'm.	No
1258	National Pin Co.....	"	Pins.....	90	84	10	26	12	1 01	"	Yes
1259	J. C. Widman & Co.....	"	Furniture.....	41	41	10	26	9	1 46	"	No
1260	Wm. Steinbrecher.....	"	Wagons.....	3	2	10	26	12	2 50	None	"
1261	Gardner Elevator Co.....	"	Elevators.....	46	46	10	26	12	1 80	Gas..	"
1262	John Beyster.....	"	Bldg. mat.....	14	14	9	26	12	1 78	St'm.	No
1263	Yeoman's Lumber & Box Co.....	"	Boxes.....	40	40	10	26	12	2 00	"	Yes
1264	E. Starret.....	"	Lumber.....	10	10	10	26	12	2 00	"	No
1265	F. J. Garrett.....	"	Blacksmith'g.....	3	3	9	26	12	2 67	None	"
1266	Schulte Soap Co.....	"	Soap.....	15	10	10	26	12	1 60	St'm.	Yes
1267	David Sanitary Works.....	"	Fertilizer.....	15	15	10	26	12	1 67	None	"
1268	H. W. Raper.....	"	Bldg. mat.....	3	2	10	26	12	2 50	"	"
1269	A. Laffrey.....	"	".....	50	25	9	26	12	2 00	St'm.	Yes
1270	Stephen Pratt.....	"	Boilers.....	33	26	10	26	12	1 39	"	"
1271	Peninsular Electric Light Co....	"	Electricity.....	30	30	24	30	12	1 67	"	No
1272	Griffin Wheel Co.....	"	Wheels, etc.....	220	200	10	26	12	1 75	"	Yes
1273	Detroit Bridge & Iron Works.....	"	Bridges.....	500	500	10	26	12	1 60	"	"
1274	J. M. Haviland.....	"	Cakes, etc.....	16	16	9	26	12	2 00	"	"
1275	American Lady Corset Co.....	"	Corsets.....	555	555	9	26	12	1 00	S & E	"
1276	The Lee Injector Mfg. Co.....	"	Valves, etc.....	15	15	10	26	12	2 00	S & G	"
1277	F. O. Huber.....	"	Capsules.....	60	60	10	26	9	1 00	G & E	"
1278	Seely's Mfg. Co.....	"	Perfumes.....	80	80	10	26	12	1 56	S & E	Yes
1279	Penberthy Injector Co.....	"	Valves, etc.....	97	97	10	26	12	1 88	St'm.	"
1280	National Tel. Equipment Co.....	"	Supplies.....	45	45	10	26	12	1 50	"	"
1281	Nelson Baker & Co.....	"	Pharmacists.....	250	250	10	26	12	1 50	"	"
1282	The Seamless Steel Tube Co.....	"	Steel tubing.....	150	30	10	26	12	2 50	"	"
1283	Detroit Tobacco Co.....	"	Cigars.....	34	21	9	26	12	1 44	None	"
1284	Glove Cash Register Co.....	"	Registers.....	60	60	10	26	12	1 46	St'm.	Yes
1285	Story & Holzhauser.....	"	Sheet metal.....	4	4	9	26	5	2 50	None	"
1286	Detroit City Gas Co.....	"	Gas.....	80	80	24	30	12	1 65	St'm.	Yes
1287	F. X. Rousseau Mfg. Co.....	"	Machinery.....	6	6	10	26	12	2 00	"	No
1288	Mead & Co.....	"	".....	20	8	10	26	12	2 25	"	"
1289	West Side Lumber Co.....	"	Boxes, etc.....	45	45	10	26	12	1 34	"	Yes
1290	Parker, Webb & Co.....	"	Meats.....	175	150	10	26	12	1 50	"	No
1291	Hammond, Standish & Co.....	"	".....	130	130	10	26	12	1 89	"	"
1292	Nagel & Barbier Jr.....	"	Repairs.....	4	4	10	26	12	2 50	None	"
1293	Mich. Ornamental Glass Works..	"	Glass.....	30	25	10	26	12	1 48	Rent.	"
1294	The Weiler Cash Register Co....	"	Registers.....	19	19	9½	24	9	1 31	"	"
1295	The Star Corundum Wheel Co....	"	Wheels.....	9	9	10	26	12	1 22	"	"
1296	Detroit Twist Drill Co.....	"	Drills.....	34	34	10	26	12	1 50	"	"
1297	J. F. Hastys & Sons.....	"	Barrels.....	54	54	10	26	12	1 57	St'm.	No
1298	Swales Bros. & Co.....	"	Clothing.....	25	12	9	26	12	1 00	Gas..	"
1299	Detroit Range Boiler Co.....	"	Boilers.....	30	30	10	26	12	1 50	St'm.	No
1300	The Hargreaver Mfg. Co.....	"	Frames.....	326	300	10	26	12	93	"	"

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 27.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1301	Hees, Macfarlane & Co	Detroit.....	Shades	30	30	10	26	12	\$1.83	St'm.	Yes
1302	Detroit Barrel Co.....	"	Barrels	32	32	10	26	8	1.25	"	No
1303	Wolverine Box Co.....	"	Boxes	62	58	11	26	12	1.03	"	"
1304	Detroit Steel & Spring Co.....	"	Springs.....	500	300	24	26	12	1.67	"	"
1305	Det. Steel & Spring Co. Foundry.	"	Castings.....	200	140	24	26	12	2.13	"	"
1306	C. Collins	"	Repairs.....	3	3	10	26	12	2.67	None	"
1307	Burt Hanna	"	Boxes	4	4	10	26	5	1.75	Kent.	"
1308	W. H. Grigg	"	"	15	9	9	26	6	1.00	"	"
1309	Geo. C. Wetherlee	"	Brushes, etc.....	49	49	9	26	12	.82	"	"
1310	C. W. Restrirk.....	"	Dressed lum	8	8	10	26	12	2.00	"	"
1311	Menzier & Crawford.....	"	Shoes.....	50	40	10	26	12	1.40	Gas..	"
1312	Mrs. Mary Beaubean.....	"	Millinery.....	3	3	10	26	12	1.33	None	"
1313	Lemuel Averill.....	"	Building.....	3	3	9	26	12	2.00	"	"
1314	F. J. Bachmann	"	Cigars.....	3	3	8	26	12	2.00	"	"
1315	Mrs. E. T. Allen	"	Millinery.....	7	5	10	26	12	1.80	"	"
1316	C. F. Besancon.....	"	Tins, etc	12	12	10	26	11	1.09	Gas..	"
1317	A. E. D. Allen.....	"	Building.....	4	3	9	26	12	2.00	None	"
1318	M. A. Allen.....	"	Millinery.....	3	3	10	26	12	1.67	"	"
1319	I. J. Bean.....	"	"	4	4	10	26	12	1.50	"	"
1320	Richard Avery	"	Building.....	3	2	9	26	12	2.00	"	"
1321	Andrew Baetz.....	"	Cigars.....	4	4	8	26	12	1.75	"	"
1322	F. S. Dickinson	"	Blacksmith'g	3	3	10	26	12	2.67	"	"
1323	American Car & Foundry Co.....	"	R. R. cars.....	2200	1700	10	26	12	1.30	St'm.	Yes
1324	David Brandt.....	"	Blacksmith'g	2	2	10	26	12	2.12	None	"
1325	Margaret Arden.....	"	Cigars.....	2	2	8	26	12	1.50	"	"
1326	Brady Bros.....	"	Baked goods..	4	4	10	26	12	2.25	"	"
1327	Jacob Binder.....	"	Blacksmith'g	2	2	10	26	12	2.25	"	"
1328	E. J. C. Archer	"	Building.....	3	3	9	26	12	2.00	"	"
1329	John B. Baker.....	"	Cigars.....	3	3	9	26	12	1.67	"	"
1330	M. J. Theisen	"	Lumber.....	14	13	10	26	12	1.56	St'm.	No
1331	A. Atlivaick.....	"	Blacksmith'g	2	2	10	26	12	2.25	None	"
1332	C. W. Armstrong	"	Cigars.....	3	3	8	26	12	1.67	"	"
1333	P. J. Hickey	"	Blacksmith'g	3	3	10	26	12	2.67	"	"
1334	Adam Angermeier	"	Building.....	2	2	9	26	12	2.00	"	"
1335	H. Abramsohn	"	Cigars.....	3	3	9	26	12	1.67	"	"
1336	Elmer B. Allen.....	"	Millinery.....	3	3	10	26	12	1.33	"	"
1337	A. F. Beer	"	Blacksmith'g	3	3	10	26	12	2.33	"	"
1338	W. B. Allen.....	"	Building.....	3	3	9	26	12	2.00	"	"
1339	Wm. Munroe Co.....	"	Bldg. mater'l.	20	17	9	26	12	2.06	Rent.	"
1340	Edward Behr	"	Cigars.....	3	3	9	26	12	1.67	None	"
1341	Roe, Stephens Mfg. Co.....	"	Brass work.....	200	100	10	26	12	"	St'm.	No
1342	Louis Applefield	"	Cigars.....	4	4	8	26	12	1.75	None	"
1343	John Allen.....	"	Building.....	4	4	9	26	12	2.00	"	"
1344	H. A. Apel.....	"	"	3	3	9	26	12	2.00	"	"
1345	Emil Albus	"	Cigars.....	3	3	8	26	12	2.00	"	"
1346	Dossin & Beaudion.....	"	Canned goods	10	10	10	26	12	1.50	"	"
1347	John H. Bond & Son.....	"	Cigars.....	4	4	10	26	12	1.75	"	"
1348	Lemuel Averill.....	"	Building.....	3	3	10	26	12	2.00	"	"
1349	The Model Hand Laundry.....	"	Laundry.....	4	4	10	26	12	1.75	"	"
1350	Colonial Cigar Co.....	"	Cigars.....	5	5	8	26	12	2.00	"	"

• Running day and night.
• Not given.
• Running over 10 hours per day.

Inspection Book No. 28.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1351	Blackmore & Fitch.....	Detroit.....	Millinery.....	5	4	10	26	12	\$1 50	None	.....
1352	S. A. Burgirin.....	"	"	5	5	10	26	12	1 75	"	.....
1353	The Avery Preserving Co.....	"	Preserves.....	90	50	10	26	12	1 90	St'm.	No
1354	Jacob Brunnhofer.....	"	Cigars.....	3	3	8	26	12	1 67	None	.....
1355	Damaschke & Spader.....	"	Carriages.....	5	4	10	26	12	2 50	"	.....
1356	Richard Avery.....	"	Building.....	3	3	10	26	12	2 33	"	.....
1357	Belz & Lemke.....	"	Printing.....	3	2	10	26	12	2 50	St'm.	No
1358	Joseph Meld.....	"	Repairs.....	3	3	10	26	12	1 67	None	.....
1359	Michigan Home Bakery.....	"	Baked goods.....	4	4	10	26	12	2 00	"	.....
1360	Smith, Day & Co.....	"	Chairs, etc.....	50	45	10	24	12	1 00	Gas.	.....
1361	Detroit Copper & Brass Works.....	"	Brass goods.....	500	500	10	26	12	"	St'm.	No
1362	Jacob Marzialek.....	"	Repairs.....	2	2	10	26	12	2 00	None	.....
1363	U. S. Heater Co.....	"	Heaters.....	135	80	10	26	12	2 13	St'm.	No
1364	American Car & Foundry Co.....	"	Bar iron.....	425	425	20	25	10	2 35	"	s
1365	F. D. Cohn & Co.....	"	Cigars.....	5	5	8	26	12	2 00	None	.....
1366	M. Campbell Fan Mill Co.....	"	Mills.....	15	12	10	26	12	1 58	St'm.	No
1367	Josephine Blackmore.....	"	Millinery.....	4	4	10	26	12	1 50	None	.....
1368	Christian Smith.....	"	Baked goods.....	5	5	10	26	12	2 00	"	.....
1369	J. Wallinske.....	"	Clothing.....	4	3	10	26	12	2 00	"	.....
1370	Charles Boldt.....	"	Cigars.....	3	3	10	26	12	2 00	"	.....
1371	E. J. C. Archer.....	"	Building.....	4	4	10	26	12	2 25	"	.....
1372	G. H. Kent.....	"	Repairs.....	3	3	10	26	12	1 67	"	.....
1373	Detroit Chemical Works.....	"	Phosphate.....	40	38	24	30	11	1 70	St'm.	No
1374	The McRoe & Roberts Co.....	"	Brass work.....	300	131	10	26	12	1 38	"	Yes
1375	Louis Coblitz.....	"	Cigars.....	3	3	8	26	12	1 67	None	.....
1376	Martha Booske.....	"	Millinery.....	4	3	10	26	12	1 67	"	.....
1377	West Detroit Lumber Yard.....	"	Lumber.....	6	6	10	26	12	1 50	St'm.	No
1378	Julius Bing.....	"	Cigars.....	2	2	9	26	12	2 00	None	.....
1379	S. J. Lewandosky.....	"	Baked goods.....	3	3	10	26	12	2 00	"	.....
1380	Emma Canto.....	"	Cigars.....	3	3	8	26	12	1 67	"	.....
1381	William Apel.....	"	Building.....	3	3	10	26	12	2 00	"	.....
1382	Mrs. H. H. Begrow.....	"	Millinery.....	4	3	10	26	12	1 67	"	.....
1383	Mrs. A. F. Breitmeyer.....	"	"	5	3	10	26	12	1 33	"	.....
1384	Adolph Buettner.....	"	Cigars.....	3	3	9	26	12	1 67	"	.....
1385	D. C. Karr.....	"	Repairs.....	3	2	10	26	12	2 00	"	.....
1386	Scotten, Dillon & Co.....	"	Tobacco.....	125	100	10	26	1	1 25	St'm.	No
1387	Samuel Bernette.....	"	Cigars.....	3	3	10	26	12	1 67	None	.....
1388	George Brown.....	"	Millinery.....	5	4	10	26	12	1 75	"	.....
1389	H. A. Apel.....	"	Building.....	5	5	10	26	12	2 00	"	.....
1390	Ferrin Bros.....	"	Sort beans.....	100	100	10	26	9	53	St'm.	Yes
1391	Albert Hoefler.....	"	Repairs.....	3	3	10	26	12	1 67	None	.....
1392	Champion Steam Carpet Beater.....	"	Cleaning.....	6	2	10	26	12	1 50	"	.....
1393	William Barton.....	"	Building mat.....	3	2	10	26	12	2 00	"	.....
1394	J. F. Dingeman.....	"	Cigars.....	3	3	8	26	12	1 67	"	.....
1395	L. Clark.....	"	Millinery.....	3	3	10	26	12	1 67	"	.....
1396	V. J. Selewski.....	"	Repairs.....	3	2	10	26	12	2 00	"	.....
1397	Samuel Flannery.....	"	Blacksmith'g.....	3	2	9	26	12	2 25	"	.....
1398	Adolph Becker.....	"	Baked goods.....	3	2	10	26	12	2 00	"	.....
1399	Rudolf Friedrichs.....	"	Tables.....	13	12	10	26	12	1 25	St'm.	No
1400	M. McNamara.....	"	Varnish.....	5	4	10	26	12	1 75	None	.....

* Running day and night.

* Not given.

* Running 7 days per week.

* Running over 10 hours per day.

Inspection Book No. 39.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1401	American Injector Co.	Detroit.	Brass Goods.	50	45	10	26	12	\$1 40	St'm.	Yes
1402	Frederick Dettling	"	Cigars.	2	2	8	26	12	2 00	None	
1403	Mrs. M. B. Champion	"	Millinery	4	3	10	26	12	1 67	"	
1404	Stone Bros.	"	Bicycle rep's	4	3	10	26	12	2 00	"	
1405	Ferris & Habermass	"	Blacksmith'g	5	4	9	26	12	2 50	"	
1406	E. L. Beck	"	Baked goods.	2	2	10	26	12	2 00	"	
1407	Wm. Bartell	"	Bld'g mater'l.	2	2	10	26	12	2 00	"	
1408	West Side Harness Co.	"	Harnesses	4	2	10	26	12	2 00	"	
1409	J. A. Rink	"	Clothing	4	4	10	26	12	1 50	"	
1410	D. L. Barr	"	Bld'g mater'l.	5	3	10	26	12	2 00	"	
1411	Wm. F. Dalach	"	Cigars.	2	2	8	26	12	2 00	"	
1412	Julia F. Canfield	"	Millinery	2	2	10	26	12	2 00	"	
1413	E. Watson	"	Bicycle rep's	4	3	10	26	12	1 67	"	
1414	Wm. Wright & Co.	"	Special furn.	90	83	8	26	12	2 00	"	
1415	Albert Erschig	"	Blacksmith'g	2	2	9	26	12	2 00	"	
1416	August Bauer	"	Baked goods.	3	2	10	26	12	2 00	"	
1417	C. B. Hutchins	"	Car. roofing.	6	6	10	26	12	1 67	"	
1418	Henry Copeland	"	Cigars.	6	9	8	26	12	2 00	"	
1419	Nathan Burton	"	Millinery	5	4	10	26	12	1 67	"	
1420	Harry Well	"	Bicycle rep's	3	2	10	26	12	2 00	"	
1421	A. Eby	"	Blacksmith'g	3	2	9	26	12	2 00	"	
1422	Co-operative Foundry	"	Castings.	30	30	10	26	12	1 83	"	
1423	John W. Ballman	"	Bld'g mater'l.	3	3	10	26	12	2 00	"	
1424	Wallace Barkume	"	Baked goods.	2	2	10	26	12	2 00	"	
1425	Michigan Glass Painting Co.	"	Glass signs.	14	10	8	26	12	70	"	
1426	Henry Conrad	"	Cigars.	3	2	8	26	12	2 00	"	
1427	James Burris	"	Millinery	5	4	10	26	12	1 67	"	
1428	E. H. Wells	"	Bicycle rep's	4	2	10	26	12	2 00	"	
1429	W. A. Duvall	"	Blacksmith'g	3	2	9	26	12	2 25	"	
1430	Detroit Wire and Iron Works.	"	Wire goods.	45	41	10	26	12	60	St'm.	No
1431	George Bailey	"	Bld'g mater'l.	3	2	10	26	12	2 00	None	
1432	G. D. Bader	"	Baked goods.	3	3	10	26	12	2 00	"	
1433	Sun Vapor Stove Co.	"	Stoves	4	4	10	26	2	2 00	Gas.	
1434	Robert Bennett	"	Bld'g mater'l.	3	3	10	26	12	2 00	None	
1435	James Bolger	"	Baked goods.	2	2	10	26	12	2 00	"	
1436	Detroit Cash and Credit Parlors.	"	Millinery	7	4	10	20	12	1 75	"	
1437	C. C. Wright	"	Bicycle rep's	2	2	10	26	12	2 00	"	
1438	O. W. Goetsch	"	Cigars.	2	2	8	20	12	2 00	"	
1439	A. H. Bierkamp	"	Bld'g mater'l.	5	5	9	26	12	2 00	"	
1440	H. R. Edwards	"	Millinery	4	4	10	26	12	1 25	"	
1441	Edward Gabriel	"	Cigars.	2	2	8	26	12	2 00	"	
1442	Frances Dunbar	"	Millinery	3	2	10	26	12	1 00	"	
1443	Valentine Schroder	"	Candles	10	7	10	26	12	1 43	"	
1444	A. J. Beavis	"	Bld'g mater'l.	4	2	10	26	12	2 00	"	
1445	T. W. Brady	"	Baked goods.	3	3	10	26	12	2 00	"	
1446	E. Drinkwater	"	Millinery	3	3	10	26	12	1 67	"	
1447	J. A. Bleber	"	Bld'g mater'l.	4	2	10	26	12	2 00	"	
1448	Lasar Frunsky	"	Sorting rags.	7	6	9	26	12	71	"	
1449	G. C. Frauchauf	"	Cigars.	3	2	8	26	12	2 00	"	
1450	Frank Herdman	"	Blacksmith'g	3	2	9	26	12	2 00	"	

Inspection Book No. 80.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1451	Harry Well.....	Detroit.....	Bicycles.....	2	2	10	26 12	2	\$2.00	None	
1452	Fitzsimmons Bros.....	"	Cigars.....	4	3	8	26 12	1	66	"	
1453	Gebhard Paper Co.....	"	Ink.....	6	6	10	26 12	1	66	Elec.	
1454	Phillip Bertel.....	"	Bldg. mat.....	5	3	9	26 12	2	00	None	
1455	N. Feldman.....	"	Cigars.....	4	3	8	26 12	1	66	"	
1456	H. E. Watson.....	"	Bicycle rep's.....	4	2	10	26 12	2	00	"	
1457	B. J. Dennis.....	"	Millinery.....	6	4	10	26 12	1	50	"	
1458	A. Heisner.....	"	Blacksmith'g.....	2	2	9	26 12	2	25	"	
1459	E. C. Boettcher.....	"	Baked goods.....	2	2	10	26 12	2	00	"	
1460	Stone Bros.....	"	Bicycle rep's.....	4	2	10	26 12	2	00	"	
1461	Mary Berlin.....	"	Baked goods.....	3	2	10	26 12	2	00	"	
1462	N. Faber.....	"	Cigars.....	3	2	8	26 12	2	00	"	
1463	Detroit Fence Co.....	"	Wire fences.....	20	3	8	26 12	2	00	Gas	
1464	C. E. Darwin.....	"	Millinery.....	10	4	10	26 12	1	50	None	
1465	J. B. Beaubien.....	"	Building mat.....	5	3	10	26 12	2	00	"	
1466	David Exel.....	"	Cigars.....	2	2	8	26 12	2	00	"	
1467	Snyder & Arndt.....	"	Bicycle rep's.....	4	3	10	26 12	1	67	"	
1468	T. Halsig.....	"	Blacksmith'g.....	3	2	9	26 12	2	00	"	
1469	A. A. Beer.....	"	Baked goods.....	3	3	10	26 12	2	00	"	
1470	Nettie Allen.....	"	Dressmaking.....	3	3	10	26 12	1	33	"	
1471	J. J. Engel.....	"	Cigars.....	3	2	8	26 12	2	00	"	
1472	Schneider & Seider.....	"	Awnings, etc.....	25	5	10	26 12	2	00	Elec.	
1473	Geo. T. Herzer.....	"	Hat frames.....	30	4	9 1/2	26 12	1	50	None	
1474	C. E. Daggette.....	"	Millinery.....	15	7	10	26 12	1	43	"	
1475	Angus Beaton.....	"	Building mat.....	3	2	10	26 12	2	00	"	
1476	D. J. Dwyer.....	"	Cigars.....	2	2	8	26 12	2	00	"	
1477	Mary Allen.....	"	Dressmaking.....	3	2	10	26 12	1	50	"	
1478	A. C. Freehauf.....	"	Blacksmith'g.....	3	2	9	26 12	2	25	"	
1479	Nellie Allen.....	"	Dressmaking.....	5	3	10	26 12	1	33	"	
1480	Wm. Bartsch.....	"	Building mat.....	3	2	10	26 12	2	00	"	
1481	J. J. Dillon.....	"	Millinery.....	4	3	10	26 12	1	33	"	
1482	French Cigar Co.....	"	Cigars.....	3	3	8	26 9	1	67	"	
1483	Pollick, Pettibone & Chapman	"	Millinery.....	50	4	9	26 12	1	75	"	
1484	J. B. Crout.....	"	"	4	2	10	26 12	1	00	"	
1485	Frank Bernier.....	"	Building mat.....	4	2	10	26 12	2	00	"	
1486	F. J. Debal.....	"	Cigars.....	3	2	8	26 12	2	00	"	
1487	Anna Albert.....	"	Dressmaking.....	4	3	10	26 12	1	33	"	
1488	J. Freda.....	"	Blacksmith'g.....	2	2	9	26 12	2	00	"	
1489	Mrs. H. Devrieze.....	"	Millinery.....	3	2	10	26 12	1	00	"	
1490	James Bent.....	"	Building mat.....	4	2	9	26 12	2	00	"	
1491	Mary Adams.....	"	Dressmaking.....	5	3	10	26 12	1	33	"	
1492	A. Aby.....	"	Blacksmith'g.....	3	2	9	26 12	2	25	"	
1493	Jacob Hook.....	"	Dressmaking.....	75	75	9	26 12	1	00	"	
1494	McDonald, Wessels & Ames Co.	"	Leather, etc.....	13	13	10	26 12	1	00	Rent.	
1495	Louis Goldstein.....	"	Cigars.....	2	2	8	26 12	2	00	None	
1496	F. D. Carson.....	"	Clothing.....	3	3	10	26 12	1	67	"	
1497	John S. Spiegel Co.....	"	Shirts, etc.....	55	20	10	26 1	1	47	St'm.	Yes
1498	Johnston Optical Co.....	"	Optical goods.....	50	50	9	26 12	1	40	Gas	
1499	Henry Goldsmith.....	"	Millinery.....	6	4	10	26 12	1	50	None	
1500	Niemetta Cycle Co.....	"	Bicycle rep's.....	4	2	10	26 12	2	00	"	

Inspection Book No. 31.

Inspection District No. 1.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection.		Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1501	Samuel Black	Detroit	Bld'g mater'l.	5	3	9	26	12	2	00	None		
1502	August Clapp	"	Clothing	3	2	10	26	12	1	50	"		
1503	Anton Cizak	"	"	4	4	10	26	12	1	66	"		
1504	Geo. Heymoss	"	Blacksmith'g	2	2	9	26	12	2	00	"		
1505	August Bauer	"	Baked goods.	3	2	10	26	12	2	00	"		
1506	F. Roettcher	"	Bld'g mater'l.	5	4	9	26	12	2	00	"		
1507	Wm. Chlinski	"	Clothing	4	4	10	26	12	1	75	"		
1508	Frank Cetlinski	"	Baked goods.	3	2	10	26	12	2	00	"		
1509	A. J. Jacobi	"	Blacksmith	3	2	10	26	12	2	00	"		
1510	H. D. Clark	"	Clothing	4	2	10	26	12	1	50	"		
1511	L. J. O'Dell	"	Bicycle rep'rs	4	2	10	26	12	2	00	"		
1512	Francis Grundy	"	Millinery	4	3	10	26	12	1	67	"		
1513	Goldwater Cigar Co.	"	Cigars	10	6	8	26	12	2	00	"		
1514	Robert Bolton	"	Bld'g mater'l.	4	3	9	26	12	2	00	"		
1515	Christian Gutmause	"	Baked goods.	3	2	10	26	12	2	00	"		
1516	James Kelly	"	Blacksmith'g	3	2	10	26	12	2	00	"		
1517	Ike Cohn	"	Clothing	4	3	10	26	12	1	67	"		
1518	Weaver Bros.	"	Bicycles	5	3	10	26	12	2	00	"		
1519	Helma Henning	"	Millinery	4	3	10	26	12	1	67	"		
1520	Jacob Grieser	"	Cigars	2	2	8	26	12	2	00	"		
1521	L. J. Christie	"	Clothing	3	3	10	26	12	1	67	"		
1522	H. K. Bonke	"	Bld'g mater'l.	6	4	9	26	12	2	00	"		
1523	Emil Heidel	"	Baked goods.	3	3	10	26	12	1	67	"		
1524	Fred Lutz	"	Blacksmith'g	3	2	9	26	12	2	00	"		
1525	Wm. Damm	"	Clothing	3	2	10	26	12	1	67	"		
1526	Harry Weil	"	Bicycles	3	2	10	26	12	2	00	"		
1527	Henry Yoe & Co.	"	Brass goods	7	7	10	26	12	1	45	"		
1528	Madam Ronen Hunt	"	Millinery	15	8	10	26	12	1	50	"		
1529	Louis Greiser	"	Cigars	3	3	8	26	12	1	67	"		
1530	J. V. Ciprion	"	Clothing	3	3	10	26	12	1	67	"		
1531	M. H. Carroll & Son	"	Bld'g mater'l.	10	5	9	26	12	2	00	"		
1532	L. L. Mallory	"	Baked goods.	4	4	10	26	12	1	75	"		
1533	Hygiene Seat Co.	"	Closet fix't's.	3	3	10	26	12	1	67	Rent.		
1534	J. S. Morston	"	Blacksmith'g	2	2	9	26	12	2	00	None		
1535	C. DeClair	"	Clothing	3	2	10	26	12	1	50	"		
1536	Bert Vincent	"	Bicycle rep'rs	3	2	10	26	12	2	00	"		
1537	Caroline Karrer	"	Millinery	4	3	10	26	12	1	33	"		
1538	James J. Griffin	"	Cigars	3	2	8	26	12	2	00	"		
1539	H. D. & A. M. Fisher	"	Dresses	6	5	10	26	12	1	40	"		
1540	Crown Knitting Co.	"	Knit goods	6	3	9	26	12	33	Gas.			
1541	W. C. Stoddard	"	Millinery	7	4	10	26	12	1	25	None		
1542	S. Wolfson	"	Blacksmith'g	2	2	9	26	12	2	00	"		
1543	F. A. Pacey	"	Baked goods.	2	2	10	12	12	1	50	"		
1544	Rebecca Whyte	"	Millinery	4	2	10	26	12	1	00	"		
1545	W. C. Hardt	"	Cigars	3	2	8	26	12	2	00	"		
1546	Henry Wagner	"	Clothing	3	2	10	26	12	1	50	"		
1547	J. J. Shupe	"	Baked goods.	2	2	9	26	12	2	00	"		
1548	Albert Crossly	"	Bld'g mater'l.	3	2	9	26	12	2	00	"		
1549	Jacob Freda & Son	"	Clothing	10	6	10	26	12	1	33	"		
1550	F. C. Gindenu	"	Cigars	2	2	8	26	12	2	00	"		

Inspection Book No. 32.

Inspection District No. 1.—Concluded.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1551	Linn & Gibson	Detroit.....	Millinery.....	6	3	10	26	12	\$1 33	None	.....
1552	Winter & Mueller.....	"	Blacksmith'g.....	4	3	9	26	12	2 33	"	.....
1553	John Niemiec.....	"	Baked goods..	3	3	10	29	12	1 67	"	.....
1554	H. S. Weaver.....	"	Millinery.....	5	3	10	26	12	1 00	"	.....
1555	Anthony Hansen.....	"	Cigars.....	2	2	8	26	12	1 50	"	.....
1556	Ludwig Turko.....	"	Clothing.....	4	3	10	26	12	1 33	"	.....
1557	Boyer Machine Co.....	"	Tools.....	190	190	10	26	1	2 05	St'm.	No
1558	Newcomb, Endicott & Co.....	"	Dresses, etc..	37	37	9	26	10	95	"	.....
1559	Mannassa & Wieber.....	"	Printing.....	14	12	9	26	12	1 33	Rent.	.....
1560	F. F. Ingram & Co.....	"	Medicines.....	50	50	9 1/2	26	12	1 00	St'm.	No
1561	American Car & Foundry Co.....	"	Cars.....	2250	350	10	26	9	1 20	"	.....
1562	Harry Goldstein.....	"	Clothing.....	3	3	10	26	12	1 67	None	.....
1563	Ferdinand Groth.....	"	Cigars.....	3	2	8	26	12	2 00	"	.....
1564	E. & A. Fessler.....	"	Dresses.....	5	4	10	26	12	1 50	"	.....
1565	T. H. Roser.....	"	Baked goods..	3	3	10	26	12	2 00	"	.....
1566	Crossman, Gregory & Co.....	"	Bld'g materi'l	10	4	9	26	12	2 00	"	.....
1567	Elise Dressmaking Co.....	"	Dresses.....	7	5	10	26	12	1 40	"	.....
1568	Chas. Groth.....	"	Cigars.....	3	2	8	26	12	2 00	"	.....
1569	Rosa Kirchner.....	"	Millinery.....	4	2	10	26	12	1 00	"	.....
1570	Edward Merrell.....	"	Blacksmith'g	2	2	9	26	12	2 00	"	.....
1571	R. Straub.....	"	Millinery.....	5	3	10	26	12	1 00	"	.....
1572	Peter Haunany.....	"	Cigars.....	3	2	8	26	12	2 00	"	.....
1573	T. DeClare.....	"	Clothing.....	4	3	10	26	12	1 33	"	.....
1574	Henry Tranton.....	"	"	4	3	10	26	12	1 33	"	.....
1575	Max Kleker.....	"	Baked goods..	3	3	10	26	12	2 00	"	.....
1576	Antoine Corbelle.....	"	Bld'g materi'l	10	4	9	26	12	2 00	"	.....
1577	G. H. Fisher.....	"	Clothing.....	4	3	10	26	12	1 33	"	.....
1578	L. F. Shevillott.....	"	Bld'g materi'l	3	2	9	26	12	2 00	"	.....
1579	J. S. Curtice.....	"	Dresses.....	6	4	10	26	12	1 50	"	.....
1580	T. J. Grosshaus.....	"	Cigars.....	3	2	8	26	12	2 00	"	.....
1581	Ernest Kern.....	"	Millinery.....	15	6	10	26	12	1 17	"	.....
1582	Joseph Rueshman.....	"	Blacksmith'g	2	2	9	26	12	2 00	"	.....
1583	Henry Matthews.....	"	Baked goods..	2	2	10	26	12	2 00	"	.....
1584	B. Melsner.....	"	"	3	3	10	26	12	1 67	"	.....
1585	Wm. Stoup.....	"	Millinery.....	10	6	10	26	12	1 17	"	.....
1586	James Halstead.....	"	Cigars.....	4	2	8	26	12	2 00	"	.....
1587	G. Heymann.....	"	Clothing.....	6	4	10	26	12	1 50	"	.....
1588	F. C. Reichlin.....	"	Baked goods..	3	2	10	26	12	2 00	"	.....

DEDUCTIONS FROM WORK IN FIRST DISTRICT.

During the year there were 1,588 factories inspected, as against 1,585 in 1899. All these factories were reported as running at the time of inspection, while there were six reported idle in 1899. These factories were averaging 9.7 hours work per day, while in 1899 they were averaging 9.8, a slight decrease in time worked per day. They were averaging 26.8 days per month and 11.6 months per year.

If running full capacity they would employ 58,105 people, an average of 36.6 for each factory. At the time of inspection they were employing 33,637 males and 12,735 females, a total of 46,372 employes, which is an average of 29.2 for each factory inspected, or an average less full capacity of 7.4 each. The females were employed in 676 factories, an average of 18.8 in each factory employing females. There is a slight decrease in the total number of employes as compared with 1899.

It was found that 281 factories employed children between the ages of 14 and 16 years, and that these children, so employed, numbered 2,042, an average of 7.2 for each factory so employing children. This shows 37 more factories employing children, but that there were 513 less children employed than in 1899. Orders for the dismissal of all children under 14 years old, found working, were immediately made.

The average daily pay rolls of these factories aggregates \$66,645.33, an average for each factory of \$41.96, or an average for each employe of \$1.44. This shows an increase over 1899 of nine cents per day for the daily wages of this army of workers. This is significant, as the report shows an increase of 5 per cent of female employes as compared with 1899.

These factories have been in operation an average of 11 years each, one dating back as far as 1810. It is also interesting to note that 677, or 42 per cent of them, have been put in operation since 1895, the largest number for any one year being established in 1897. The year 1900 will show a large per cent of new factories.

That business in these factories is constantly increasing is evidenced by the returns, as 1,130, or 71 per cent, report an increase in business; 458, or 29 per cent, report more capital invested, and 322, or about 20 per cent, say they are giving employment to more laborers.

In the item of the kind of power used in these factories, it was found that 378, or 24 per cent, use steam power; 136 use electricity; 109 use gasoline; 42 use hand power; 88 rent their power, which is presumably steam, and 835, or over 52 per cent, use no power. This would indicate that about 65 per cent of the factories using power are using steam, and about 35 per cent use gasoline or electricity. As a motive power, these latter are fast coming into use.

Of the 378 reported using steam power, the boilers of 299, or 80 per cent, were provided with low water alarms, 201 of which were in good condition. These alarms represented 22 different devices, the "Reliance" being used in 106 factories, and 90 using the "Expansion Tube." All devices in use are subject to the approval of the Commissioner of Labor.

Orders for changes to comply with the law were made in 485 factories. This is a large increase over the orders of 1899, it being accounted for by reason of the new law requiring low water alarms to be placed on all steam boilers, as comparatively few boilers were equipped with these devices when the law went into effect. The orders for filing sworn statements for all children employed between the ages of 14 and 16 years is also an important item in this district.

The report of the accidents occurring during the year show an increase over that of 1899, there being 57 reported from 49 factories. Nine of these accidents were fatal, 25 serious, 21 severe and two slight. See table and deductions of accidents on pages following:

CHANGES ORDERED DURING THE YEAR.

DISTRICT NO. 1.

[The number refers to factory number in table.]

- 8.—Automatic gates for elevator.
- 14.—Sworn statements for all children employed.
- 20.—Sworn statements for all children employed.
- 24.—Boy under 14 discharged; sworn statements for all children employed, and saw protected.
- 25.—Sworn statements for all children employed.
- 31.—Sworn statements for all children employed, and setscrews protected.
- 32.—Alarm on boiler.
- 34.—Setscrews on overhead shafting protected.
- 36.—Main belt on paper cutter protected.
- 37.—Setscrews, and two belts, protected.
- 38.—Automatic gates for elevator, and two water closets for males and females.
- 39.—Setscrews and belt, protected.
- 41.—Girl under 14 discharged; setscrews protected and gearings on revolving pans protected.
- 42.—Overhead setscrews protected, and alarm on boiler repaired.
- 43.—A water closet.
- 44.—All setscrews protected.
- 45.—All setscrews protected, and alarm on boiler repaired.
- 49.—Automatic gates on rear elevator.
- 51.—Sworn statements for all children employed.
- 54.—Alarm on boiler repaired.
- 55.—Sworn statements for all children employed, and separate water closet for females.
- 56.—Sworn statements for all children employed; automatic gates for elevator, and all setscrews protected.
- 57.—Water closet for employes.
- 61.—Sworn statements for all children employed.
- 62.—Gearings on dough mixer protected.
- 66.—Automatic gates for elevator.
- 70.—Setscrews protected, and alarm for boiler.
- 72.—Belt protected.

- 73.—All setscrews protected.
- 74.—All setscrews protected.
- 75.—All setscrews protected.
- 76.—Sworn statements for all children employed.
- 78.—Automatic gates for elevators.
- 79.—Sworn statements for all children employed.
- 80.—All setscrews protected.
- 82.—Sworn statements for all children employed, and all setscrews protected.
- 84.—Sworn statements for all children employed.
- 85.—All setscrews protected, and alarm for boiler.
- 90.—Sworn statements for all children employed.
- 96.—Handrails for stairs.
- 98.—Sworn statements for all children employed.
- 99.—Sworn statements for all children employed.
- 106.—Sworn statements for all children employed.
- 112.—Setscrews overhead protected.
- 116.—All setscrews protected.
- 118.—Sworn statements for all children employed; all setscrews protected, and alarm on boiler repaired.
- 119.—All setscrews protected.
- 123.—All setscrews protected.
- 124.—Sworn statements for all children employed.
- 131.—Two water closets for employes.
- 134.—All setscrews protected, and alarm on boiler repaired.
- 137.—All setscrews protected.
- 139.—Sworn statements for all children employed; a water closet for females, and an iron strip for elevator gates.
- 141.—All setscrews protected, and a setscrew on fly wheel.
- 143.—Exhaust fans for buffing and polishing wheels.
- 144.—All setscrews protected.
- 153.—Sworn statements for all children employed.
- 154.—Sworn statements for all children employed, and elevator gates repaired.
- 156.—Overhead setscrews protected.
- 157.—Sworn statements for all children employed.
- 161.—Overhead setscrews protected.
- 162.—Setscrews protected; elevator gates repaired, and alarm on boiler.
- 170.—Alarm on boiler repaired.
- 171.—Setscrews protected.
- 181.—Sworn statements for all children employed.
- 182.—Sworn statements for all children employed.
- 184.—Elevator gates repaired.
- 185.—Belt hole in floor around main belt enclosed.
- 187.—Sworn statements for all children employed.
- 189.—Water closet for females.
- 190.—Water closet for females.
- 191.—Sworn statements for all children employed.
- 193.—Sworn statements for all children employed.
- 196.—Setscrews overhead protected.
- 197.—Sworn statements for all children employed.
- 198.—Sworn statements for all children employed, and setscrews protected.
- 199.—Overhead setscrews protected, and alarm on boiler kept in good condition.

- 206.—Setscrews protected, and alarm for three boilers.
- 207.—Setscrews overhead protected.
- 209.—Overhead setscrews protected.
- 210.—Sworn statements for all children employed.
- 212.—All overhead setscrews in box factory protected.
- 213.—Sworn statements for all children employed.
- 214.—Sworn statements for all children employed.
- 216.—All setscrews protected; gearing on punch guarded, and stairs repaired leading to pattern shop.
- 217.—Alarm on boiler repaired.
- 218.—Setscrews protected, and alarm on boiler.
- 220.—Alarm on boiler.
- 222.—Polishing machine connected with blower.
- 224.—All setscrews protected.
- 226.—All setscrews protected.
- 231.—Sworn statements for all children employed; boy ordered from dangerous machinery, and setscrews protected.
- 232.—Setscrews protected, and alarm for boiler.
- 234.—Setscrews and drive belt protected; automatic gates for elevator, and alarm on boiler.
- 235.—Setscrews protected, and alarm on boiler.
- 236.—All setscrews protected, and separate closet for females.
- 240.—Sworn statements for all children employed, and setscrews protected.
- 242.—Setscrews protected.
- 244.—Children not to work over 60 hours per week; blower in grinding room, also alarm on boiler, repaired.
- 245.—Setscrews protected.
- 246.—Sworn statements for all children employed; setscrews protected, and blower moved in polishing room.
- 251.—Fire escape on rear of building; sworn statements for all children employed, and stairs by flywheel enclosed.
- 252.—All setscrews protected, and alarm on boiler repaired.
- 255.—Sworn statements for all children employed, and all setscrews overhead protected.
- 259.—Setscrews in pipe shop protected, and alarm on boiler repaired.
- 260.—Setscrews protected; blower in polishing room; floor repaired; sworn statements for all children employed, and alarm on boiler repaired.
- 262.—Overhead setscrews protected.
- 274.—Sworn statements for all children employed.
- 278.—Blower for polishing machine.
- 279.—Setscrews protected, and alarm on boiler repaired.
- 280.—Floor repaired.
- 291.—Fire escape on south side of building, and gates on elevator repaired.
- 306.—Sworn statements for all children employed.
- 311.—Sworn statements for all children employed.
- 312.—Sworn statements for all children employed.
- 314.—Sworn statements for all children employed.
- 318.—Sworn statements for all children employed.
- 320.—Alarm on boiler repaired.
- 322.—Sworn statements for all children employed.
- 325.—Water closet repaired.

- 329.—Setscrews protected, and alarm on boiler repaired.
- 333.—Boy under 14 years dismissed.
- 334.—Sworn statements for all children employed.
- 339.—Sworn statements for all children employed.
- 341.—Overhead setscrews protected, and gates to elevator made to work automatically.
- 346.—Sworn statements for all children employed; blower in polishing room repaired, and alarm on boiler repaired.
- 347.—Railing around flywheel on gas engine.
- 349.—Gate and cable to elevator repaired; setscrews protected, and alarm for boiler.
- 350.—Setscrews protected, and two water closets for employes.
- 354.—Alarm on boiler repaired, and setscrews protected.
- 355.—Alarm on boiler repaired, and all setscrews protected.
- 362.—Sworn statements for all children employed.
- 363.—Sworn statements for all children employed.
- 375.—Boy under 14 discharged.
- 384.—Sworn statements for all children employed; all setscrews protected; elevator gates repaired, and alarm for boiler.
- 385.—Exhaust fan connected with band resaw; water closet put in, and alarm on boiler repaired.
- 388.—All setscrews protected, and alarm on boiler repaired.
- 390.—Sworn statements for all children employed; paper removed from foot of stairs, and alarm for boiler.
- 392.—All setscrews protected, also gearings on band resaw, trimmer, logjack, lumber transfer and gang saw; railings around drive belt and beside blower belt, and key on wood slasher removed.
- 408.—Setscrews protected; alarm for boiler, and ventilator repaired.
- 410.—Setscrews protected.
- 411.—Alarm on boiler repaired.
- 412.—Alarm for boiler, and setscrews protected.
- 420.—Sworn statements for all children employed, and separate closet for females.
- 426.—Sworn statements for all children employed.
- 436.—All setscrews protected; separate closet for females, and alarm for boiler repaired.
- 440.—Exit to fire escape left open, and water closets ventilated.
- 441.—Sworn statements for all children employed; setscrews protected; alarm for one boiler, and other alarms repaired.
- 442.—All setscrews protected; gearing on mixer protected, and alarm on boiler repaired.
- 447.—Sworn statements for all children employed; two girls discharged; all setscrews protected.
- 451.—Sworn statements for all children employed.
- 456.—Sworn statements for all children employed.
- 457.—Sworn statements for all children employed.
- 458.—Sworn statements for all children employed, and exhaust fan for buffing room.
- 460.—Alarm on boiler repaired, and setscrews overhead protected.
- 462.—Alarm on boiler-repaired, and all setscrews protected.
- 463.—Sworn statements for all children employed.
- 466.—Sworn statements for all children employed, and new water closet put in.
- 467.—New water closet put in; hand and top railing for stairs, and stairs repaired.
- 471.—Sworn statements for all children employed.
- 472.—Sworn statements for all children employed, and blower on sander repaired.
- 481.—Sworn statements for all children employed.
- 488.—Setscrews protected, and closet cleaned.

- 491.—Setscrews protected.
- 493.—Water closet for females; main belt enclosed, and ends of shafting protected.
- 494.—Alarm on boiler repaired; sworn statements for all children employed, and end of shafting protected.
- 495.—End of shafting on third floor protected.
- 497.—Sworn statements for all children employed.
- 499.—Opening to fire escape cleared.
- 500.—Sworn statements for all children employed.
- 502.—Setscrews protected.
- 505.—Alarm for boiler.
- 507.—Alarm for boiler, and all setscrews protected.
- 510.—Gearing on crusher protected.
- 512.—Fire escape on south side of building.
- 513.—Alarm for boiler, and gearing on motor in machine shop protected.
- 515.—Alarm on boiler repaired.
- 516.—Sworn statements for all children employed.
- 519.—Sworn statements for all children employed.
- 520.—Sworn statements for all children employed.
- 524.—Sworn statements for all children employed; band saw protected; setscrews protected, and closet repaired properly.
- 526.—Alarm for boiler.
- 527.—Sworn statements for all children employed; bar across door and blower put in motion.
- 532.—Alarm for boiler.
- 533.—Setscrews protected.
- 539.—All setscrews protected.
- 540.—All setscrews protected.
- 541.—All setscrews protected.
- 545.—Setscrews protected; automatic gates for elevator, and exhaust fans put in motion.
- 548.—Sworn statements for all children employed, and alarm for boiler.
- 560.—Sworn statements for all children employed.
- 561.—Sworn statements for all children employed; automatic gates for elevator, and alarm for boiler.
- 563.—Ventilation in factory, and door unlocked during working hours.
- 568.—Alarm for boiler, and proper water closet.
- 569.—Alarm on boiler repaired, and all setscrews protected.
- 572.—Gearing on boarding machine protected.
- 573.—Boy under 14 dismissed.
- 574.—Floor repaired.
- 578.—Sworn statements for all children employed, and gearing on polish machine protected.
- 579.—Water closet repaired.
- 581.—Sworn statements for all children employed.
- 582.—Alarm on boiler repaired; setscrews protected, and elevator gates repaired.
- 583.—Setscrews protected, and opening in sidewalk for a fire escape.
- 587.—Sworn statements for all children employed.
- 590.—Ladies' closet properly screened.
- 596.—Sworn statements for all children employed; automatic gates for elevator, and alarm for boiler.
- 597.—Sworn statements for all children employed.

- 604.—Exhaust fans; automatic gates for elevator; setscrews and gearing protected.
- 606.—Gearing on feed cutter protected.
- 615.—Girl under 14 discharged.
- 617.—Alarm for boiler.
- 618.—Separate closet for females.
- 620.—Exhaust fans put in motion; setscrews protected, and hand and top rails for stairs.
- 625.—Setscrews, also gearing on punch, protected.
- 627.—Automatic gates for elevator; belts, also gearing on pans, protected; opening in floor closed, and drug room ventilated.
- 648.—Sworn statements for all children employed.
- 652.—Sworn statements for all children employed.
- 665.—Girl under 14 discharged.
- 679.—Sworn statements for all children employed, and setscrews protected.
- 687.—Belt opening protected, and water closet floor covered.
- 695.—Gearing on dough mixer protected.
- 699.—Alarm for boiler.
- 700.—Sworn statements for all children employed.
- 705.—Sworn statements for all children employed.
- 709.—Alarm for boiler.
- 710.—Sworn statements for all children employed; cut off saw protected, and floor repaired.
- 716.—Boy under 14 discharged, and alarm for boiler.
- 737.—Sworn statements for all children employed, and overhead setscrews protected.
- 738.—Sworn statements for all children employed.
- 739.—Automatic gates for elevator, and main belt through floor from gas engine protected.
- 743.—Separate closet for females on first floor.
- 744.—Separate closet for females.
- 745.—Dynamo protected.
- 748.—Sworn statements for all children employed.
- 749.—Alarms for boilers.
- 750.—Sworn statements for all children employed, and overhead setscrews protected.
- 751.—Sworn statements for all children employed.
- 753.—Automatic gates for elevators.
- 756.—Fire escape on front of building.
- 758.—Sworn statements for all children employed.
- 759.—Exhaust fans for sand paper wheels.
- 760.—Sworn statements for all children employed.
- 762.—Sworn statements for all children employed.
- 764.—Sworn statements for all children employed.
- 765.—Sworn statements for all children employed.
- 769.—Blowers for polishing room; setscrews protected, and sworn statements for all children employed.
- 770.—Setscrews protected.
- 771.—Elevator gate repaired, and alarm on boiler repaired.
- 773.—Fire escape on west side of building.
- 798.—Sworn statements for all children employed; cut off saw and all setscrews protected; alarm on boiler repaired, and gearing on stickers protected.
- 799.—Setscrews protected.
- 800.—Setscrews protected.

- 803.—Exhaust fans changed to increase suction.
- 813.—Automatic gates on elevator.
- 820.—Handrails for stairs, and obstruction from stairway removed.
- 821.—Sworn statements for all children employed.
- 822.—Automatic gates for elevator, and setscrews protected.
- 823.—Blowers connected with polishing wheels.
- 824.—Automatic gates on elevators, and hole in floor repaired.
- 826.—Three setscrews protected.
- 828.—Setscrews protected, and handrails on stairs.
- 829.—Gearings on bending machine and belt opening protected.
- 830.—Alarm on boiler repaired; setscrews protected, and water closet screened.
- 831.—Sworn statements for all children employed.
- 832.—All setscrews protected.
- 836.—Alarm for boiler, and sworn statement for all children employed.
- 837.—Alarm for boiler.
- 839.—Alarm for boiler, and all setscrews protected.
- 841.—Sworn statements for all children employed.
- 842.—Sworn statements for all children employed.
- 844.—Sworn statements for all children employed, and setscrews protected.
- 845.—Alarm on boiler repaired, and all setscrews protected.
- 851.—Alarm on boiler repaired, and steam escapes repaired.
- 852.—Automatic gates for elevator.
- 853.—Boy under 14 dismissed.
- 855.—Main belt enclosed.
- 856.—Sworn statements for all children employed; alarms for boilers; setscrews protected; exhaust fans on sanders and sand belts, and shifters on floor locked.
- 859.—Stairway opening enclosed.
- 860.—Setscrews protected.
- 874.—Obstruction from window leading to fire escape removed.
- 875.—Boy under 14 dismissed, and sworn statements for all children employed.
- 878.—Alarm for boiler.
- 879.—Sworn statements for all children employed; belt protected, and setscrews protected.
- 880.—Sworn statements for all children employed.
- 881.—Alarm for boiler.
- 884.—Automatic gates on elevator.
- 885.—All setscrews protected; gearing on pans protected, also shifter on buzz-saw.
- 887.—Sworn statements for all children employed.
- 888.—Alarm for boiler.
- 891.—Overhead setscrews protected.
- 892.—Sworn statements for all children employed; setscrews in machine covered, gearing on lathe covered; alarm for boiler, and setscrews in wood working department protected.
- 896.—Alarm for boiler, and water closet cleaned.
- 898.—Setscrews protected, and automatic gates for elevator.
- 901.—Sworn statements for all children employed; alarm on boiler repaired, and set-screw on planer protected.
- 904.—Alarm for boiler.
- 905.—Alarm on boiler repaired.
- 909.—Sworn statement for all children employed, and all setscrews protected.

- 911.—Sides of glazing machine protected; railing around flywheel, and all setscrews protected.
- 912.—Alarm on boiler repaired.
- 913.—Alarm on boiler repaired.
- 914.—Sworn statements for all children employed; alarm for boilers, and exhaust fans to take dust from dump.
- 919.—Alarm on boiler.
- 920.—Alarm for boiler; handrail on stairs; belt boxed, and proper water closet.
- 921.—Alarm on boiler repaired; setscrews protected, and handrails on stairs.
- 924.—Gearing on doweling machine and setscrews protected; handrail on stairs.
- 925.—Sworn statements for all children employed, and setscrews protected.
- 926.—Alarm for boiler.
- 930.—Alarm for boiler.
- 932.—Sworn statements for all children employed.
- 933.—Alarm for boiler, and setscrews protected.
- 935.—Setscrews protected, and band saw guarded.
- 936.—Sworn statements for all children employed, and handrail on stairs.
- 940.—Sworn statements for all children employed; gearing on mill and setscrews protected.
- 942.—Sworn statements for all children employed.
- 944.—Alarm on boiler repaired.
- 945.—Alarm for boiler, and automatic gates for elevator; also elevator repaired.
- 946.—Elevator repaired; alarm for boiler, and automatic gates for elevator.
- 951.—Hoistway guarded, and fire escape on south side of building.
- 952.—All setscrews protected.
- 959.—Overhead setscrews protected.
- 960.—Water closet cleaned.
- 962.—Setscrews protected.
- 968.—Sworn statements for all children employed; setscrews protected; alarm on boiler repaired, and expansion tube on other boiler repaired.
- 969.—All setscrews protected.
- 970.—Setscrews protected, and stairs repaired.
- 975.—Alarm for boiler.
- 976.—Sworn statements for all children employed, and alarm on boiler repaired.
- 977.—Sworn statements for all children employed, and alarm on boiler repaired.
- 981.—Sworn statements for all children employed.
- 982.—Sworn statements for all children employed; setscrews protected; floor in engine room repaired, and alarm for boiler.
- 983.—Sworn statements for all children employed.
- 984.—Gearing on bread mixer protected.
- 991.—Sworn statements for all children employed; alarm on boiler, and setscrews protected.
- 993.—All setscrews covered.
- 994.—Boy under 14 discharged; gearing on machine 24 protected; all setscrews protected; alarm on boiler repaired; elevator gates repaired, and shifter on No. 6 locked.
- 996.—Setscrews covered.
- 998.—Alarm on boiler repaired; water closet removed, and setscrews covered.
- 1004.—Sworn statements for all children employed; all setscrews covered; automatic gates on first floor for elevator, and jointer protected.
- 1010.—Set screws covered, and run boards removed.

- 1011.—Setscrews covered, and boy under 16 removed from dangerous machinery.
- 1022.—Sworn statements for all children employed; handrails for stairs, and jointers protected.
- 1024.—Sworn statements for all children employed.
- 1026.—Sworn statements for all children employed.
- 1028.—Sworn statements for all children employed.
- 1031.—Handrails for stairs leading to boiler room.
- 1033.—Sworn statements for all children employed; boy under 14 discharged, and setscrews protected.
- 1038.—Automatic gates for elevator, and handrails for stairs.
- 1040.—Sworn statements for all children employed; floor repaired; belt removed, and alarm for boiler.
- 1041.—Sworn statements for all children employed.
- 1042.—Alarm for elevator.
- 1043.—Sworn statements for all children employed.
- 1044.—Belt on engine protected; belt holes protected, and alarm for boiler.
- 1045.—Gearing protected; hand rail for stairs; bar across door, and alarm on boiler repaired.
- 1047.—Setscrews protected, and drive belt on engine guarded.
- 1048.—Sworn statements for all children employed; all setscrews protected, and alarm on boiler repaired.
- 1049.—Setscrews protected; also gearing on printer; floor in box room repaired; water closet cleaned, and alarm for boiler.
- 1052.—Setscrews protected, and alarm on boiler repaired.
- 1053.—Sworn statements for all children employed; elevator gates; setscrews protected; gearing protected; exhaust fan, and alarm for boiler repaired.
- 1054.—Setscrews and jointer protected, and circular saw stopped when not in use.
- 1057.—Belt running through floor and setscrews protected; handrail, and alarm on boiler repaired.
- 1060.—Handrails for stairs.
- 1063.—Alarm for boiler.
- 1070.—Alarm for boiler.
- 1072.—All setscrews on shafting protected.
- 1073.—Alarm for boiler.
- 1076.—Handrail for stairs.
- 1077.—Sworn statements for all children employed; elevator door protected; setscrews protected, and alarm on boiler repaired.
- 1078.—Setscrews protected, and exhaust fan set in motion.
- 1079.—Sworn statements for all children employed, and setscrews protected.
- 1080.—Gearing and setscrews protected, and alarm for boiler.
- 1081.—One child under 14 discharged; sworn statements for all children employed; setscrews and gearing protected, and one new alarm for boiler and one repaired.
- 1083.—Elevator gates repaired.
- 1084.—Automatic gates for elevator.
- 1092.—Sworn statements for all children employed.
- 1097.—Setscrews protected, and alarm on boiler repaired.
- 1098.—Sworn statements for all children employed.
- 1099.—Alarm on boiler repaired.
- 1103.—Sworn statements for all children employed; handrails on stairs; setscrews protected and overhead weight protected.
- 1104.—Sworn statements for all children employed.

- 1107.—One girl under 14 dismissed.
- 1111.—Setscrews protected, and alarm on boiler repaired.
- 1112.—Belts on sticker protected.
- 1113.—Gearing on large press protected, and setscrews overhead protected.
- 1116.—Setscrews protected.
- 1119.—Sworn statements for all children employed.
- 1125.—Gearing on punch covered.
- 1138.—Sworn statements for all children employed, and one child under 14 discharged.
- 1140.—Sworn statements for all children employed; one child under 14 discharged, and setscrews protected.
- 1141.—Sworn statements for all children employed; elevator gates repaired, and band saw protected.
- 1142.—Automatic gates for elevator; setscrews covered, and alarm for boiler.
- 1145.—Setscrews protected and alarm for boiler.
- 1147.—Sworn statements for all children employed.
- 1149.—Elevator openings protected; automatic gates for elevator, and fire escape.
- 1150.—Sworn statements for all children employed, and one girl under 14 discharged.
- 1155.—Sworn statements for all children employed, and automatic gates for elevator.
- 1156.—Setscrews covered, and clutcher reset.
- 1157.—Opening from first floor, on top of stairs, enclosed.
- 1158.—Belt over balcony protected.
- 1159.—Sworn statements for all children employed; blowers put in; automatic gates for elevator, and alarm on boiler repaired.
- 1160.—Sworn statements for all children employed, and one child under 14 discharged.
- 1164.—Setscrews protected.
- 1165.—Setscrews protected.
- 1172.—Sworn statements for all children employed; fire escape on building; automatic gates for elevator, and alarm on boiler repaired.
- 1179.—Sworn statements for all children employed; setscrews protected, and alarm for boiler.
- 1180.—Setscrews protected.
- 1181.—Door cut through for fire escape.
- 1182.—Sworn statements for all children employed, and fire escape on west end of building.
- 1183.—Sworn statements for all children employed, and one boy under 14 discharged.
- 1184.—Sworn statements for all children employed, and setscrews protected.
- 1187.—Sworn statements for all children employed.
- 1188.—Sworn statements for all children employed.
- 1189.—Overhead setscrews protected.
- 1192.—Alarm on boiler repaired; gearing on supposure machine, belt, dynamo and setscrews protected.
- 1194.—Door kept unlocked during working hours.
- 1197.—Alarm for boiler.
- 1199.—Setscrews protected; boy taken from saw, and alarm on boiler repaired.
- 1201.—Sworn statements for all children employed, and setscrews protected.
- 1202.—Alarm for boiler, and setscrews protected.
- 1204.—Gearings on paste machine protected, and setscrews on shaft protected.
- 1212.—Alarm for boiler, and setscrews protected.
- 1214.—Exhaust fans for shaper and woodworking machines, and all setscrews protected.
- 1215.—Setscrews protected, and automatic gates for elevator.
- 1217.—Sworn statements for all children employed, and setscrews protected.

- 1218.—Sworn statements for all children employed.
- 1219.—Alarm on boiler repaired; blowers on sanders; coupling on shaft protected, and saw stopped while not in use.
- 1221.—Alarm on boiler repaired.
- 1230.—All setscrews protected, and closet cleaned and repaired.
- 1231.—Sworn statements for all children employed; setscrews in machine shop protected, and weights on dry kilns protected.
- 1234.—Sworn statements for all children employed.
- 1239.—Alarm for boiler.
- 1244.—Setscrews protected, also gearing on stone planer.
- 1247.—Sworn statements for all children employed; child under 14 discharged, and alarm for boiler.
- 1249.—Alarm for boiler.
- 1250.—Alarm for boiler, and setscrews protected.
- 1252.—Setscrews and hoistway protected.
- 1255.—Setscrews protected, and belt boxed.
- 1258.—Setscrews protected.
- 1259.—Boy under 14 discharged; sworn statements for all children employed; closet cleaned, and shaft in glass room boxed.
- 1261.—Setscrews protected.
- 1262.—Setscrews protected, and alarm for boiler.
- 1263.—Sworn statements for all children employed, and all setscrews protected.
- 1266.—Sworn statements for all children employed, and setscrews protected.
- 1269.—Sworn statements for all children employed, and setscrews protected.
- 1270.—All setscrews protected.
- 1271.—Alarm on boiler repaired.
- 1272.—Sworn statements for all children employed, and set screws protected.
- 1273.—All setscrews, couplings, belt and flywheel on engine protected.
- 1274.—Gearing on cake machine and roller brakes protected.
- 1278.—Sworn statements for all children employed.
- 1280.—Handrail for stairs, and setscrews protected.
- 1284.—Sworn statements for all children employed.
- 1286.—Vats, and railing on run board protected; railing repaired; elevator opening protected; also setscrews protected, and ladder removed.
- 1287.—Alarm for boiler.
- 1290.—Sworn statements of all children employed; setscrews protected, and alarm on boiler repaired.
- 1291.—Setscrews protected; alarm on boiler repaired; gearing protected; automatic gates for elevator, and belt hole boxed.
- 1299.—All setscrews protected, and alarm on boiler repaired.
- 1300.—Sworn statements for all children employed; alarm on boiler repaired; fire escape on east end of shipping room.
- 1301.—Fire escape on north end of building.
- 1302.—Sworn statements for all children employed; alarm for boiler; railing around flywheel, and all setscrews protected.
- 1303.—Sworn statements for all children employed, and children not to work between 6 and 7 a. m.
- 1304.—Alarm on boiler repaired; gearing on oil tester protected, and setscrews protected.

- 1305.—Sworn statements for all children employed; alarm on boiler repaired; setscrews protected; belt and railing on side of drivewheel protected.
- 1307.—Sworn statements for all children employed.
- 1308.—Gearing on printer protected.
- 1309.—Sworn statements for all children employed; handrails on stairs, and setscrews protected.
- 1310.—Setscrews protected.
- 1311.—Sworn statements for all children employed; automatic gates for elevator, and fire escape on front of building.
- 1316.—Setscrews protected, and a water closet.
- 1323.—Setscrews protected; railing protected; automatic gates for elevator; alarm for boiler, and emery wheel protected.
- 1330.—Cut-off saw, gearing on planer and setscrews protected.
- 1339.—All setscrews protected.
- 1341.—Sworn statements for all children employed; automatic gates for elevator; setscrews protected; alarm for boiler, and water closet cleaned and ventilated.
- 1353.—Alarm on boiler repaired, and drive belt on engine protected.
- 1360.—Sworn statements for all children employed; child under 14 discharged, and exit to fire escape cleared.
- 1361.—Alarm on boiler repaired; gearing protected, and fire escape from rivet room.
- 1363.—Setscrews on boring machine and emery wheel protected.
- 1364.—Sworn statements for all children employed, and all setscrews protected.
- 1366.—Sworn statements for all children employed, and alarm for boiler.
- 1373.—Alarm for boiler, and all setscrews protected.
- 1386.—Setscrews protected.
- 1390.—Fire escape on bean sorting room, and closet cleaned and screened.
- 1399.—Hand rails for stairs.
- 1401.—Alarm for boiler repaired; all setscrews protected; sworn statements for all children employed, and fire escape on south side of building.
- 1414.—All setscrews protected, and sworn statements for all children employed.
- 1422.—All setscrews protected, and handrails on stairs.
- 1430.—Alarm on boiler, and sworn statements for all children employed.

ACCIDENTS—FIRST DISTRICT

TABLE AND DEDUCTIONS THEREFROM

Inspection District No. 1.

Accidents reported in

No. of factory for 1900.	Name of establishment.	Location.	Date of accident.	Name of person.	Age of person.	Native or foreign born.
24	The Detroit Vapor Stove Co.	Detroit.	Aug. 26, 1899.	Harry Ryan	14	Nat.
25	Meier & Schuknecht	"	" —, 1899.	Dave Layman	20	"
36	Curtis Mulford Co.	"	Nov. 6, 1899.	Clifton Gamble	18	"
54	Public Lighting Commission	"	Oct. 7, 1899.	Frank Bogold	18	For.
61	Schadt & Mathewson	"	July 7, 1899.	Clara Liebold	18	"
62	National Biscuit Co. (Depew Bakery)	"	June 22, 1899.	Louis Landonberger	32	"
70	Russell Wheel & Foundry Co.	"	Sept. 14, 1899.	Lewis Weirnerd	21	"
137	Edward F. Lee	"	Feb. 4, 1900.	Bennie Fork	16	Nat.
143	C. W. Muckenhim	"	Dec. —, 1899.	Geo. Klarer	25	"
169	Progressive Knitting Mills	"	" —, 1899.	Neato Lyman	15	"
170	Holidays Paper Box Co.	"	Nov. —, 1899.	Edward Page	22	"
170	"	"	July —, 1899.	Claude Vantassel	21	"
209	C. R. Wilson Carriage Co.	"	Feb. —, 1900.	George Crooks	34	For.
214	H. Scherer & Co.	"	Dec. 31, 1899.	Toney Klebba	14	"
252	Clark Can Co.	"	"	Gerald Hoffman	—	Nat.
252	"	"	Jan. —, 1900.	Chas. Riemann	17	"
252	"	"	Dec. 15, 1899.	Harry Taylor	18	"
252	"	"	" —, 1899.	John Smith	16	"
252	"	"	Oct. 19, 1899.	Herman Bastick	14	"
252	"	"	" 4, 1899.	Edward Taylor	16	"
252	"	"	Sept. 17, 1899.	Joseph Langlois	24	For.
347	Northern Engineering Works	"	Mar. —, 1900.	Oliver Harrison	24	"
348	Cartright Bros.	"	Nov. 30, 1899.	James Ray	44	For.
392	Delta Lumber Co.	"	Dec. 2, 1899.	Joe Shannahan	20	"
441	Detroit Shipbuilding Co.	"	April 9, 1900.	Walter Springer	20	"
441	"	"	" 9, 1900.	N. Gayear	42	"
462	Parisian Steam Laundry	"	Sept. —, 1899.	Mary Gory	16	Nat.
477	The Edison Illuminating Co.	"	"	Fred Boy	30	"
540	Siroh Brewing Co.	"	Feb. 28, 1900.	C. Huber	30	"
582	Thorp, Hawley & Co.	"	Dec. —, 1899.	Steven Crow	64	"
604	Diamond Stamp Ware Co.	"	April 25, 1900.	George Clark	55	For.
750	Calvert Lithographing Co.	"	Feb. 13, 1900.	Willie Schueller	17	"
756	Voelkner & Reinke Manufacturing Co.	"	May —, 1900.	Emil Damaske	16	"
789	The Ireland & Mathews Mfg. Co.	"	April —, 1900.	Sylvester Zink	30	Nat.
772	The Queen Ann Soap Co.	"	Mar. —, 1900.	Henry Nevbrod	42	"
823	A. Harvey's Sons' Mfg. Co. (Ltd.)	"	Feb. —, 1900.	— Gato	15	"
856	Buick & Sherwood Mfg. Co.	"	June 4, 1900.	Thomas Digby	29	Nat.
856	"	"	July 12, 1900.	Geo. Dergell	20	"
911	Carl E. Schmidt	"	Oct. —, 1899.	Ed Rapp	19	Nat.
920	Detroit Split Wood Pulley Co.	"	July 19, 1900.	Steve Hobbs	28	For.
926	The Anderson-Wales Pulley Co.	"	Dec. —, 1900.	F. McLeod	20	Nat.
983	Detroit Valve & Washer Co.	"	July —, 1900.	James Perry	19	For.
994	Detroit House of Correction	"	Aug. 4, 1900.	John Ward	21	Nat.
1011	Murphy, Wasey & Co.	"	July 14, 1900.	Jos. Jambowski	16	For.
1104	Fox Bros.	"	May —, 1900.	O. E. Conley	30	Nat.
1112	American Harrow Co.	"	Dec. 6, 1899.	M. Ellis	40	For.
1113	Buhl Stamping Co.	"	May 15, 1900.	John Miller	26	Nat.
1184	Diamond Match Co.	"	April 10, 1900.	Frank Clark	17	"
1191	Detroit Board of Education repair shops	"	Jan. 27, 1900.	J. W. Tracy	21	"
1214	Nicholson Manufacturing Co.	"	Mar. 19, 1900.	W. S. Nicholson	45	"
1219	DeMan Bros.	"	May 23, 1900.	James Campbell	49	"
1259	J. C. Widman & Co.	"	July 14, 1900.	H. Hormer	27	"
1259	"	"	June 23, 1900.	Adolph Umbier	24	"
1286	Detroit City Gas Co.	"	July —, 1900.	— Groth	24	For.
1289	West Side Lumber Co.	"	" —, 1900.	Walter Dwyer	25	"
1305	Detroit Steel & Spring Co.	"	"	J. T. Thomas	38	Nat.
1330	M. J. Theisen	"	May —, 1900.	Walter Franklin	16	"

DEDUCTIONS FROM ACCIDENT TABLE.

Number of accidents reported in 1900.....	57
Number of accidents reported in 1899.....	30
Per cent of accidents in 1900.....	3.6
Per cent of accidents in 1899.....	1.9
Number of fatal accidents in 1900.....	9
Number of fatal accidents in 1899.....	4
Number of serious accidents in 1900.....	25
Number of serious accidents in 1899.....	12
Number of severe accidents in 1900.....	21
Number of severe accidents in 1899.....	11
Number of slight accidents in 1900.....	2
Number of slight accidents in 1899.....	3
Average number of days disabled for those injured.....	44½
Number who were native born.....	34
Number who were foreign born.....	18
Nativity not known.....	5
Number who were married.....	17
Number who were single.....	40
Number under 21 years old.....	26
Number under 16 years old.....	6
Age of oldest person injured, 64 years.	
Age of youngest person injured, 14 years.	
Average age of all persons injured, 25 years.	
Number of persons who received wages during disability.....	23
Number who did not receive wages during disability.....	25
Number who received other benefits during disability.....	30
Number who did not receive other benefits during disability.....	18
Number of factories where machinery was properly guarded.....	50
Number where machinery was not properly guarded.....	7
Number of places where accident was due to carelessness.....	36
Number places where accident was not due to carelessness.....	21

It will be seen that there are more accidents reported this year than in 1899 and that the percentage of accidents is approximately greater. In each grade, of fatal, serious and severe accidents, the number was nearly doubled. This will also be noted by the average length of time the injured persons were disabled (it being 12 days more than those injured last year) that the injuries received were more serious this year.

The average age of the persons injured is less than that of last year, indicating that young employes are more apt to be injured than those of more mature years. It will also be seen that 26 of these persons were

under 21 years old and that six of these were under 16, while only two of them had passed the age of 50, the oldest being 64 years old. In this connection it will be seen that 36 of these accidents were reported as due to carelessness and that 50 of the 57 reported the machinery as properly guarded.

Of the 48 accidents, not fatal, 23 of the injured employes received wages during disability, while 25 were not kept under pay. In the matter of insurance, doctors' bills, etc., 30 of the injured persons received other benefits, while 18 did not.

SECOND DISTRICT,

COMPOSED OF THE COUNTIES

Allegan,
Barry,
Branch,
Berrien,
Calhoun,

Cass,
Eaton,
Hillsdale,
Ingham,
Jackson,

Kalamazoo,
Livingston,
Lenawee,
Macomb,
Monroe,

Oakland,
St. Joseph,
Van Buren,
Washtenaw,
Wayne, except the city
of Detroit.

B. S. McCOY,

Deputy Inspector.

REPORT OF WORK IN SECOND DISTRICT.

OFFICE OF DEPUTY FACTORY INSPECTOR,
Battle Creek, Michigan, December 1, 1900.

Hon. Joseph L. Cox,

Commissioner of Labor and Chief Factory Inspector, Lansing, Mich.:

Dear Sir—Having completed the inspection of factories and workshops of the Second District for the year 1900, I herewith submit my annual report as Deputy Factory Inspector, and in so doing will say that I take pleasure in informing you that I found very near all the factories doing all the business they could attend to and a good many of them unable to secure help enough. All running full time and in many instances overtime. Idle men were a thing of the past.

During the year 1,076 manufacturing institutions have been inspected, of which 1,061 were running and 15 idle. Several of those put down as idle are saw mills and only run during the winter, and were visited during the summer months when they were shut down, consequently they were put down as idle, when in reality they were not.

The number of changes ordered for 1900 were 663. Of this number 551 are for low water alarms, and as far as I have revisited find they are complying with orders as fast as they can get the work done.

All institutions seem very willing to make alterations, etc., which the law demands, and it is only necessary to request what is required and the matter is attended to at once.

SECTION TWO—CHILD LABOR.

I find very few institutions employing children between fourteen and sixteen years of age without having sworn statements. Have only found 47 children employed under sixteen years of age working without a sworn statement from parent or guardian, and orders have been given for these to procure same at once.

AUTOMATIC GATES FOR ELEVATORS.

During the year I have issued orders for 13 automatic gates for elevators and find that all have been complied with.

EXHAUST FANS.

The question of exhaust fans evidently has been pretty thoroughly canvassed in this district, as I find nearly every shop, where necessary, has a good exhaust system.

STAIR RAILS.

I have found but very few stairs that were not properly guarded, and upon revisiting found that all had been guarded.

MACHINERY, ETC.

During the year I have made 23 orders for guarding machines, belts, providing shifters and protecting setscrews, and as far as revisited have been complied with.

LOW WATER ALARMS.

Act 209, Public Acts of 1899, provides for placing low water alarms on stationary steam boilers used or operated in this State. During the year orders have been issued for placing 551 low water alarms, and I find that most all have complied as far as I have revisited. I find that the majority of the first-class steam plants in this district are using low water alarms, and those that are not are willing to provide same and are looking for the best device. The most resistance against using I have found is from firms that do not want to protect employes, or from engineers that think they are infallible and do not need a device to notify them of low water.

In conclusion, will say that all orders for changes, etc., have been promptly attended to as far as I have revisited. I have tried to be conservative, yet firm, in the discharge of my duties as inspector.

Respectfully yours,

B. S. McCOY,

Deputy Inspector.

Inspection Book No. 1.

Inspection District No. 2.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection, 1 for idle.		Number hours running per day.		Average number days per month.		Average number months per year.		Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1	Kalamazoo Pant and Overall Co.	Kalamazoo.	Pants, etc.	100	100	10	26	12		\$1 25	Elec.	....			
2	Henrietta Skirt Co.	"	Skirts	40	30	10	26	12		1 00	"	....			
3	Thling Bros. & Everard.	"	Blank books	100	100	10	26	12		1 25	"	....			
4	Electric Steam Laundry.	"	Laundry.	15	9	10	26	12		1 00	St'm.	No				
5	Henderson-Ames Co.	"	Supplies.	161	161	10	26	12		1 12	Elec.	....			
6	Hauselman Candy Co.	"	Candy	30	24	10	26	12		1 17	St'm.	Yes				
7	J. L. Sebring & Co.	"	Grain	3	3	10	26	12		1 78	"	No				
8	H. C. Reed	"	Cultivators	10	3	10	26	12		1 50	"	"				
9	Harrow Spring Co.	"	Springs	125	125	20	26	12		2 00	Rent.	....			
10	Johnston & Linihan.	"	Fanning mills.	5	5	10	26	12		2 00	Hand	....			
11	Kalamazoo Paper Box Co.	"	Boxes	42	42	10	26	12		90	Elec.	....			
12	Lillies Cigar Co.	"	Cigars	80	80	8	26	12		1 68	Hand	....			
13	Pease & Son	"	Printing	6	6	10	26	12		1 34	Elec.	....			
14	American Playing Card Co.	"	Cards	149	149	10	26	12		78	St'm.	Yes				
15	Upjohn Manufacturing Co.	"	Woodwork	25	25	10	26	12		1 80	Rent.	....			
16	L. J. Everett	"	Turning	6	6	10	26	12		1 50	"	....			
17	A. L. Pratt	"	Am. mach.	10	3	10	26	12		2 50	"	....			
18	Globe Casket Co.	"	Caskets	75	50	10	26	12		1 70	"	....			
19	The Kinsman-Wagner Co.	"	Garments	50	26	10	26	12		77	Elec.	....			
20	H. J. Hammond	"	Rugs	3	2	10	26	12		1 50	Rent.	....			
21	Whalen's Laundry	"	Laundry	20	15	10	26	12		1 20	St'm.	No				
22	A. M. Todd	"	Essential oils	5	5	10	26	12		1 80	"	"				
23	The Banner Laundry Co.	"	Laundry	25	24	10	26	12		92	"	"				
24	B. Cleenewerck	"	Cigars	13	13	8	26	12		1 54	Hand	....			
25	Cornell & Co.	"	Carriages	25	6	10	26	12		1 50	"	....			
26	F. E. McGlannon	"	Cigars	8	8	8	26	12		1 50	"	"				
27	Kalamazoo Railway Supply Co.	"	Ry. supplies	65	60	10	26	12		1 83	St'm.	No				
28	Bush's Laundry	"	Laundry	10	7	10	26	12		1 00	Rent.	....			
29	Dewing & Sons	"	Sash, etc.	150	150	10	26	12		1 10	St'm.	Yes				
30	Merrill Milling Co.-Eagle Mill.	"	Flour, etc.	7	1						"	No				
31	Phelps & Bigelow Windmill Co.	"	Windmill	30	25	10	26	12		1 48	Rent.	....			
32	Bush & Patterson	"	Motive power	3	3	10	26	12		2 00	St'm.	....			
33	Doubleday Bros. & Co.	"	Blank books	30	27	10	26	12		2 00	Rent.	....			
34	Kalamazoo Corset Co.	"	Corsets	475	440	10	26	12		98	Elec.	....			
35	Dunkley Celery and Pres. Co.	"	Canned goods	80	15	10	26	12		1 00	St'm.	No				
36	Kalamazoo Foundry & Mach. Co.	"	Machinery	20	12	10	26	12		2 00	"	"				
37	Kalamazoo Spring & Axle Co.	"	Axles, etc.	100	75	12	26	12		2 07	"	"				
38	Wm. Gibson	"	Machinery	9	1						Elec.	....			
39	North & Coon	"	Sash, etc.	40	39	10	26	12		1 41	St'm.	No				
40	Lull & Skinner Co.	"	Carriages	140	140	10	26	12		1 43	"	"				
41	The C. H. Dutton Co.	"	Boilers, etc.	125	100	10	26	12		1 75	"	"				
42	Kalamazoo Sled Co.	"	Handsleds	100	28	10	26	12		1 93	"	Yes				
43	Van Bochove & Sons	"	Sash, etc.	15	12	10	26	12		1 67	"	No				
44	J. G. Smith	"	Churns	6	3	10	26	12		1 50	Hand	....			
45	The Upjohn Pill and Granule Co.	"	Pills, etc.	60	55	10	26	12		1 11	St'm.	Yes				
46	Michigan Buggy Co.	"	Carriages	150	150	10	26	12		1 17	"	No				
47	American Carriage Co.	"	"	100	50	10	26	12		1 50	"	"				
48	H. Chadbourn	"	Woodwork	7	3	10	26	12		1 33	"	"				
49	Williams Manufacturing Co.	"	Tanks	50	20	10	26	12		1 40	"	"				
50	P. L. Abbey & Co.	"	Celery prep.	15	9	10	26	12		1 00	None	....			

" Running over 10 hours per day.

Inspection Book No. 2.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
51	Kalamazoo Valley Electric Co....	Kalamazoo.	Electricity....	5	5	24	26	12	\$2 00	St'm.	No
52	Amer'n Carriage Co., wood shop	"	Carriage work	20	10	10	26	12	1 50	None	No
53	Taylor's Celery Box Co.....	"	Boxes	12	1	10	26	12	1 50	St'm.	No
54	Kalamazoo Wagon Co.....	"	Carriages	125	70	8	26	12	1 50	St'm.	No
55	Michigan Buggy Co. wood shop..	"	Carriage work	50	50	10	26	12	1 50	"	No
56	Kalamazoo Casket Co.....	"	Caskets.....	25	25	10	26	12	1 52	"	"
57	Standard Wheel Co.....	"	Wheels.....	200	200	10	26	12	1 25	"	Yes
58	Montgomery, Ward & Co.....	"	Carriages.....	50	27	10	26	12	1 10	"	No
59	Kalamazoo Interior Finish Co....	"	Building mat.	30	30	10	26	12	1 33	"	"
60	The French Garment Co.....	"	Skirts.....	60	60	10	26	12	1 25	Elec.	"
61	John Gemrich.....	"	Cigars.....	5	3	8	26	12	1 67	None	"
62	Gumbesky & Polaskey.....	"	Rags.....	24	24	10	26	12	1 83	"	"
63	Wm. E. Hill & Co.....	"	Machinery....	100	100	13	26	12	1 75	St'm.	Yes
64	E. T. Marsh.....	"	Rags.....	5	3	10	26	12	1 00	None	"
65	Kalamazoo Gazette.....	"	Newsp'rs, etc.	18	18	10	26	12	1 40	Elec.	"
66	Kalamazoo Evening News.....	"	"	18	18	10	26	12	2 00	"	"
67	Kalamazoo Publishing Co.....	"	Blank books.	24	14	10	26	12	1 80	"	"
68	The Daily Telegraph.....	"	Newsp'rs, etc.	20	20	10	26	12	2 00	"	"
69	Kalamazoo Gas & Electric Co....	"	Gas.....	3	3	12	26	12	1 67	St'm.	No
70	Humphrey Mfg. & Plating Co....	"	Water heaters	20	20	10	26	12	2 00	Gas..	"
71	The Star Brass Works.....	"	Brass castings	8	8	10	26	12	1 50	Elec.	"
72	Everett McHugh & Co.....	"	Wood work....	5	3	10	26	12	2 00	"	"
73	Kalamazoo Pure Food Co.....	"	Health foods..	5	2	10	26	12	1 50	"	"
74	Clarage & Son.....	"	Machinery....	56	56	10	26	12	2 00	St'm.	No
75	Clark's Engine & Boiler Works..	"	Engines.....	125	125	10	26	12	1 60	"	Yes
76	Kalamazoo Mattress Co.....	"	Mattresses....	10	1	"	"	"	"	"	"
77	D. C. Brownell.....	"	Gloves.....	7	2	10	26	12	1 50	None	"
78	King's Canvas Boat Co.....	"	Canvas boats..	10	4	10	26	12	1 50	"	"
79	Standard Brass Works.....	"	Brass goods..	25	9	10	26	12	2 00	St'm.	No
80	G. J. Bremer Machine Co.....	"	Machinery....	10	5	10	26	12	2 00	"	"
81	Miller, Ryder & Winterburn.....	"	Feed.....	3	2	10	26	12	1 50	"	"
82	Nash Printing Co.....	"	Printing.....	9	5	10	26	12	1 70	Rent.	"
83	Standard Cigar Co.....	"	Cigars.....	5	2	8	26	12	1 50	None	"
84	Municipal Lighting Plant.....	"	Electricity....	6	6	10	30	12	2 00	St'm.	No
85	Michigan Asylum.....	"	State inst't'n.	"	"	24	30	12	"	"	"
86	Fuller Manufacturing Co.....	"	Implementa....	20	20	10	26	12	2 00	W'tr.	"
87	C. B. Ford.....	"	Woodwork....	35	35	9	26	12	1 37	St'm.	No
88	Bryant Paper Co.....	"	Paper.....	300	300	24	26	12	1 00	"	Yes
89	Kalamazoo Paper Co., Mill No. 1.	"	"	135	135	24	26	12	1 00	"	"
90	City Union Brewery.....	"	Beer.....	6	4	10	26	12	1 75	"	No
91	Kalamazoo Paper Co., Mill No. 2.	"	Paper.....	125	125	24	26	12	1 20	"	"
92	Kalamazoo Sugar Co.....	"	Sugar.....	200	1	"	"	"	"	"	"
93	Kalamazoo Gas Co.....	"	Gas.....	13	13	10	30	12	1 92	None	"
94	A. M. Minty.....	Battle Creek	Cigars.....	19	19	8	26	12	1 32	"	"
95	J. B. Tinklepaugh.....	"	"	6	6	8	26	12	1 33	"	"
96	John Lyons.....	"	"	2	2	8	26	12	1 00	"	"
97	White's Hand Laundry.....	"	Laundry.....	10	6	10	26	12	1 00	Elec.	"
98	Michigan Scoop Co.....	"	Boxes, etc....	6	6	10	26	12	1 50	Rent.	"
99	Falace Laundry.....	"	Laundry.....	28	17	10	26	12	1 35	St'm.	No
100	Joseph Farrell.....	"	Cigars.....	8	8	8	26	12	2 00	None	"

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 3.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
101	Battle Creek Electric Co.—Water Plant.....	Battle Creek	Electricity.....	2	2	24	30	12	\$1 75	Wtr.	....
102	Wheelock's Mills.....	"	Flour, etc.....	6	6	10	26	12	1 52	"	....
103	Eureka Weaver's Supply Co.....	"	Supplies.....	5	5	10	26	12	1 80	St'm.	No
104	Union Steam Pump Co.....	"	Pumps.....	65	65	11	26	12	2 00	"	Yes
106	Rathburn & Kraft.....	"	Dressed lum.....	15	10	9	26	12	2 00	"	....
106	M. M. Lewis.....	"	Building mat.....	15	8	9	26	12	2 00	Rent.	....
107	Bown Machine Works.....	"	Machinery.....	5	5	10	26	12	1 50	"	....
108	Ellis Publishing Co.....	"	Books.....	94	94	10	26	12	1 35	St'm.	Yes
109	Battle Creek Skirt Mfg. Co.....	"	Skirts.....	12	7	10	26	12	1 00	Wtr.	....
110	Buschner Manufacturing Co.....	"	Albums.....	23	8	10	26	12	1 50	"	....
111	Titus & Hicks.....	"	Flour, etc.....	8	8	10	26	12	1 72	"	....
112	Troy Electric Laundry.....	"	Laundry.....	30	21	10	26	12	1 19	Elec.	....
113	W. C. Gage & Son.....	"	Blank books.....	76	76	10	26	12	1 75	St'm.	Yes
114	L. B. Clapp.....	"	Dressed lum.....	15	5	10	26	12	1 00	Wtr.	....
115	Battle Creek Steam Pump Co.....	"	Pumps.....	120	120	12	26	12	1 98	St'm.	Yes
116	Battle Creek Electric Co.—Steam Plant.....	"	Electricity.....	5	5	24	30	12	2 00	"	No
117	Postum Cereal Co.....	"	Health food.....	275	270	20	26	12	1 39	"	....
118	C. & G. T. Railway Shops.....	"	Machinery.....	140	140	10	26	12	1 43	"	....
119	Nichols & Shepard.....	"	".....	500	500	10	26	12	1 78	"	Yes
120	Battle Creek Daily Moon.....	"	Newsp'r's, etc.....	19	19	10	26	12	1 79	Elec.	....
121	R. W. Snyder.....	"	Soft drinks.....	6	4	10	26	12	1 50	St'm.	No
122	Battle Creek San. Health Food Co.....	"	Health food.....	75	75	10	26	12	1 15	"	Yes
123	S. D. A. Publishing Co.....	"	Printing.....	268	268	10	26	12	1 16	"	No
124	Battle Creek San. Health Food Co. No. 2.....	"	Health food.....	9	9	10	26	12	1 33	"	Yes
125	Cereal Food Co.....	"	".....	3	3	10	26	12	1 50	None	....
126	Battle Creek Bakery Co.....	"	Crackers.....	7	7	10	26	12	2 30	St'm.	Yes
127	Knight & Fess.....	"	Sash, etc.....	12	4	10	26	12	2 00	Wtr.	....
128	Battle Creek Daily Journal.....	"	Newsp'r's, etc.....	20	20	10	26	12	1 50	E & S	No
129	W. L. Larkins.....	"	Bottle beer.....	1	1	10	26	12	2 00	St'm.	....
130	Michigan Rug Co.....	"	Rugs.....	12	3	10	26	12	1 00	Wtr.	....
131	Wilson Steam Dye Works.....	"	Dyed goods.....	2	2	10	26	12	2 00	St'm.	No
132	Werstein Bottling Works.....	"	Bottle beer.....	6	2	10	26	12	2 00	"	....
133	Anheuser-Busch Bottling Works.....	"	".....	2	2	10	26	12	2 00	"	....
134	Battle Creek Gas Light Co.....	"	Gas.....	7	7	10	30	12	1 72	"	Yes
135	Advance Thresher Co.....	"	Thresh. mach.....	462	462	10	26	12	1 95	"	No
136	Good Government Pub. Co.....	"	Newsp'r's, etc.....	40	40	10	26	12	1 50	Gas.	....
137	Duplex Printing Press Co.....	"	Presses.....	93	93	10	26	12	2 00	St'm.	No
138	John Brennan & Co.....	"	Bollers.....	65	40	10	26	12	2 00	"	Yes
139	H. B. Sherman Mfg. Co.....	"	Castings.....	20	20	10	26	12	1 50	"	No
140	Battle Creek Pure Food Co.....	"	Health food.....	75	1	.....	.....	.....	.....	"	No
141	Johnson & Zock.....	"	Machinery.....	3	3	10	26	12	2 00	Wtr.	....
142	Morning Enquirer.....	"	Newspapers.....	12	12	10	26	12	1 75	Elec.	....
143	The Willard K. Bush Co.....	Lansing	Pants, etc.....	21	21	10	26	12	1 00	"	....
144	Queen Bee Cigar Co.....	"	Cigars.....	8	8	8	26	12	2 00	None	....
145	Capital City Cigar Co.....	"	".....	13	13	8	26	12	1 54	"	....
146	Norton & Depue.....	"	Boxes.....	6	6	10	26	12	1 00	Elec.	....
147	Lansing Confectionery Co.....	"	Candy.....	21	21	10	26	12	1 50	St'm.	No
148	Davis Laundry.....	"	Laundry.....	6	4	10	26	12	1 25	"	....
149	Robert Smith Printing Co.....	"	Printing.....	145	145	10	26	12	1 79	"	....
150	Troy Laundry.....	"	Laundry.....	10	6	10	26	12	1 00	Elec.	....

* Running day and night.

* Not given.

* Running seven days per week.

" " " over 10 hours per day.

Inspection Book No. 4.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
151	Capitol Steam Laundry.....	Lansing....	Laundry.....	6	2	10	26	12	\$1 50	St'm.	No	
152	The Van Gorder Palace Laundry	"	"	14	10	10	26	12	1 15	"	"	
153	H. H. Freedman.....	"	Cigars.....	7	5	8	26	12	2 00	None	"	
154	Jarvis Engine & Machine Co....	"	Machinery.....	10	5	10	26	12	2 00	St'm.	No	
155	Michigan Condensed Milk Co....	"	Milk.....	110	105	10	26	12	1 33	"	"	
156	E. Bement's Sons.....	"	Stoves, etc....	540	540	10	26	12	1 37	"	"	
157	Colliver Shirt Factory.....	"	Shirts.....	10	10	10	26	12	1 20	Elec.	"	
158	Clark Carriage Co.....	"	Carriages.....	100	75	10	26	12	1 50	St'm.	No	
159	Star Laundry.....	"	Laundry.....	12	12	10	26	12	1 00	"	"	
160	Olds Motor Works.....	"	Engines.....	90	90	10	26	12	1 27	Gas.	"	
161	Hugh Lyons & Co.....	"	Novelties.....	38	38	14	26	12	1 84	Elec.	"	
162	Brown Lumber Co.....	"	Lumber.....	15	15	10	26	12	1 67	St'm.	No	
163	Bates & Edmonds Motor Co....	"	Engines.....	15	15	10	26	12	1 20	Gas.	"	
164	Water Works & Mun'l Lt. Plant.	"	Electricity.....	8	8	24	30	12	1 52	St'm.	No	
165	Potter Manufacturing Co.....	"	Furniture.....	100	75	10	26	12	1 20	"	"	
166	Genesee Fruit Co.....	"	Vinegar.....	30	4	10	26	12	1 50	"	"	
167	Rikerd Lumber Co.....	"	Sash, etc.....	50	40	10	26	12	1 50	"	"	
168	Alexander Furnace Co.....	"	Furnaces.....	20	6	10	26	12	2 00	Rent.	"	
169	Lansing Veneer Door Co.....	"	Doors.....	50	25	10	26	12	1 52	St'm.	No	
170	W. K. Pruden & Co.....	"	Wheels.....	15	5	10	26	12	1 80	Elec.	"	
171	Hammell Cigar Co.....	"	Cigars.....	60	55	8	26	12	1 55	None	"	
172	The Kneeland Crystal Cream Co.	"	Creameries.....	22	22	10	26	12	1 73	Elec.	"	
173	Hall Lumber Co.....	"	Lumber.....	25	14	10	26	12	1 71	St'm.	No	
174	Maud S. Pump & Wind Mill Co..	"	Pumps.....	60	60	10	26	12	1 75	"	Yes	
175	Lansing Engine & Machine Co..	"	Machinery.....	50	50	10	26	12	1 74	"	"	
176	Lansing Wheelbarrow Co.....	"	Wheelbarrows	200	200	10	26	12	1 50	"	"	
177	Lansing Spoke Co.....	"	Spokes.....	40	38	10	26	12	1 58	"	No	
178	Creole Cigar Co.....	"	Cigars.....	15	11	9	26	12	2 00	None	"	
179	Lansing Brewing Co.....	"	Beer.....	8	8	10	26	12	1 75	St'm.	Yes	
180	W. B. Stone & Son.....	"	Dressed lum.	20	10	10	26	12	1 75	W'tr.	"	
181	Christian Breisch & Co.....	"	Flour, etc.....	15	10	10	26	12	1 75	"	"	
182	Cady & Hildreth.....	"	Machinery.....	8	8	10	26	12	2 00	St'm.	No	
183	Lawrence & Van Buren.....	"	Printing.....	20	18	10	26	12	1 40	Elec.	"	
184	Lansing Wagon Works.....	"	Carriages.....	120	100	10	26	12	1 25	St'm.	No	
185	Pearl Mills.....	"	Flour, etc.....	7	7	10	26	12	1 71	W'tr.	"	
186	F. Thoman & Bro.....	"	"	13	13	10	26	12	1 85	St'm.	No	
187	White Laundry.....	Jackson	Laundry.....	35	31	10	26	12	1 13	"	"	
188	E. S. Bowman.....	"	Shirt waists..	50	45	10	26	12	1 00	Rent.	"	
189	Industrial News.....	"	Newsp'rs, etc.	9	9	10	26	12	1 50	"	"	
190	Wm. Eberbach.....	"	Cigars.....	5	2	8	26	12	2 00	None	"	
191	J. B. Timberlake.....	"	Novelties.....	15	15	10	26	12	1 50	Elec.	"	
192	McGee Bros Co.....	"	Skirts.....	25	18	10	26	12	1 00	"	"	
193	Reliance Corset Co.....	"	Corsets.....	100	64	10	26	12	1 00	"	"	
194	Central City Cigar Co.....	"	Cigars.....	9	9	10	26	12	1 38	None	"	
195	Pandoria Corset Co.....	"	Corsets.....	25	25	10	26	12	80	Elec.	"	
196	Jackson Flour Mill Mach'y Co..	"	Machinery.....	10	10	10	26	12	1 75	W'tr.	"	
197	E. M. Crippen.....	"	"	4	3	10	26	12	1 33	Elec.	"	
198	John Hutchinson Mfg. Co.....	"	"	25	25	10	26	12	2 00	St'm.	No	
199	National Wheel Co.....	"	Wheels.....	125	80	10	26	12	1 06	"	"	
200	Lewis Spring & Axle Co.....	"	Springs, etc..	125	115	10	26	12	1 85	"	"	

* Running day and night.
 * Running 7 days per week.
 * Running over 10 hours per day.

Inspection Book No. 5.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. 1 for idle.		Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
201	Coronet Corset Co.....	Jackson.....	Corsets.....	160	160	10	26	12	\$0 73	St'm.	Yes		
202	Jackson Corset Co.....	"	"	350	300	10	26	12	81	"	No		
203	Foot & Jenks.....	"	Perfumery.....	12	10	10	26	12	1 00	Elec.			
204	Standard Manufacturing Co.....	"	Shirts.....	300	300	10	26	12	92	Rent.			
205	The Bronk-Buffington Shirt Co.....	"	"	350	350	9 1/2	26	12	1 00	St'm.	Yes		
206	Jackson Plating Co.....	"	Plating.....	2	2	10	26	12	2 50	Elec.			
207	American Steam Laundry.....	"	Laundry.....	25	16	10	26	12	1 00	St'm.	No		
208	Holton & Weatherwax.....	"	Machinery.....	60	60	10	26	12	1 73	"	Yes		
209	Withington & Cooley.....	"	Tools.....	100	99	10	26	12	1 62	"			
210	A. N. Smith Broom Factory.....	"	Brooms.....	3	3	10	26	12	2 00	Elec.			
211	Jackson Gas Co.....	"	Gas.....	4	4	24	30	12	1 97	St'm.	No		
212	The Knickerbocker Co.....	"	Building mat.....	30	18	10	26	12	1 50	"			
213	Central City Soap Co.....	"	Soap.....	30	30	10	26	12	1 67	"			
214	Dennis Machine Co.....	"	Machinery.....	27	27	10	26	12	1 28	"	Yes		
215	Geo. D. Wolcott & Son.....	"	"	45	40	10	26	12	1 62	Elec.			
216	S. M. Isbell & Co.....	"	Beans.....	52	1	10	26	9	1 81	"			
217	Henry J. Adams.....	"	Sash, etc.....	25	22	9	26	12	1 50	St'm.	No		
218	Ames-Dean Carriage Co.....	"	Carriages.....	60	35	10	26	12	1 93	Gas.			
219	Imperial Wheel Co.....	"	Wheels.....	350	300	10	26	12	1 54	St'm.	Yes		
220	Harmon-Whitmore Co.....	"	Machinery.....	32	17	8	26	12	1 71	Gas.			
221	Jackson Sleigh Co.....	"	Carriages.....	100	80	10	26	12	1 67	"			
222	John Crowley.....	"	Repairs.....	8	8	10	26	12	1 87	St'm.	No		
223	D. J. Dolg.....	"	Building mat.....	30	14	9	26	12	2 14	"	Yes		
224	Yocum & Taylor.....	"	Harnesses.....	4	4	10	26	12	1 88	None			
225	W. A. Corey.....	"	Laundry.....	15	15	10	26	12	1 00	St'm.	No		
226	Wm. Eberbach.....	"	Cigars.....	8	4	8	26	12	96	None			
227	The Michigan Corset Co.....	"	Corsets.....	70	70	10	26	12	1 43	St'm.	No		
228	The Jackson Vehicle Co.....	"	Carriages.....	300	225	10	26	12	1 80	"			
229	Fuller Buggy Co.....	"	"	300	300	10	26	12	1 08	"	Yes		
230	Michigan State Prison.....	"	State inst'n.....	*							No		
231	Haehle Brewing Co.....	"	Beer.....	8	6	12	30	12	2 19	"	Yes		
232	Jackson Fire Clay S. P. & Tile Co.....	"	Brick, etc.....	40	15	10	26	6	3 33	"	No		
233	Bennett Sewer Pipe Co.....	"	Pipe, etc.....	100	90	10	30	12	1 11	"			
234	R. G. Valentine.....	"	Underwear.....	8	7	10	26		71	Elec.			
235	Jackson Awning Factory.....	"	Tents, etc.....	5	3	10	26	8	3 33	None			
236	Vandercook's Laundry.....	"	Laundry.....	9	9	10	26	12	74	Elec.			
237	Hunt Printing Co.....	"	Printing.....	12	12	9	26	12	1 00	"			
238	People's Laundry.....	"	Laundry.....	10	10	10	26	12	1 08	"			
239	Niagara Laundry Co.....	"	"	8	8	10	26	12	88	E & S	No		
240	Bortree Corset Co.....	"	Corsets, etc.....	110	110	10	26	12	72	"			
241	M. Loennecker.....	"	Cigars.....	10	7	8	26	12	1 43	None			
242	Austin, Tomlinson & Webster Mfg. Co.....	"	Wagons, etc.....	155	90	10	26	12	1 60	St'm.	No		
243	Aspinwall Manufacturing Co.....	"	Machinery.....	70	30	10	26	12	1 75	"			
244	Empire Marble & Granite Works.....	"	Monuments.....	8	6	9	26	12	1 66	None			
245	Central City Bakery.....	"	Baked goods.....	6	6	12	26	12	1 66	Gas.			
246	Albion Steam Dye Works.....	Albion.....	Dyed goods.....	3	3	10	26	12	1 00	St'm.	No		
247	H. F. Gilbert.....	"	Cleaning.....	2	1					Gas.			
248	Wm. Loder.....	"	Building mat.....	25	20	10	26	12	1 25	St'm.	No		
249	Albion Gas and Coke Co.....	"	Gas.....	6	5	24	30	12	1 03	"			
250	Albion Malleable Iron Works.....	"	Castings.....	275	250	10	26	12	1 33	"	Yes		

* State institution.

° Running 7 days per week.

° Running over 10 hours per day.

° Running day and night.

Inspection Book No. 6.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled	Number of employees when running full capacity.	Number of employees at time of inspection.	Number of employees idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
251	John L. Dolson & Sons.....	Charlotte...	Carriages.....	100	55	10	26 12	\$1 13	St'm.	No		
252	Charlotte Brewing Co.....	"	Beer.....	5	5	10	26 12	1 60	"	"		
253	Chas. Bennett Furniture Co.....	"	Furniture.....	60	60	10	26 12	1 25	"	"		
254	A. Berger.....	"	Cigars.....	5	2	8	26 12	1 75	None	.....	
255	Charlotte Manufacturing Co.....	"	Tables.....	100	82	10	26 12	1 30	St'm.	No		
256	J. Michel.....	"	Cigars.....	5	4	8	26 12	1 75	None	.....	
257	O. E. Packard.....	"	Feed.....	6	6	10	26 12	1 50	St'm.	No		
258	R. Bohn.....	"	Lumber.....	8	1	.....	.....	.....	.....	.....
259	Charlotte Republican.....	"	Newsp'rs, etc.....	6	6	10	26 12	1 66	Elec.	.....	
260	Charlotte Tribune.....	"	"	8	8	10	26 12	1 25	Gas.	.....	
261	Charlotte Leader.....	"	"	4	4	10	26 12	1 50	Elec.	.....	
262	O. E. Packard.....	"	Beans.....	40	1	.....	.....	.....	.....	.....
263	Jackson Light & Power Co.....	Jackson	Electricity.....	21	21	*24	*30 12	1 61	St'm.	Yes		
264	Jackson Novelty Mfg. Co.....	"	Oil stoves.....	100	50	10	26 12	1 35	"	No		
265	Michigan Bag & Paper Co.....	"	Bags.....	40	37	*24	26 12	76	"	.....	
266	Louis Blessing Mfg. Co.....	"	Boxes.....	50	46	10	26 12	1 14	"	Yes		
267	Jackson City Water Works.....	"	Water.....	6	6	*24	*30 12	2 17	"	No		
268	S. Heyser & Sons.....	"	Doors, etc.....	60	60	9	26 12	1 35	"	Yes		
269	Standard Oil Co. Branch Works.....	"	Oil.....	7	7	10	26 12	1 60	"	No		
270	Lake Shore Repair Shops.....	"	Repairs.....	11	11	10	*30 12	1 90	"	.....	
271	Eberle Brewing Co.....	"	Beer.....	16	16	10	26 12	2 20	"	Yes		
272	Jackson Starch Co.....	"	Starch.....	12	12	10	26 12	1 65	"	.....	
273	S. Pickles.....	"	Cut stone.....	10	10	10	26 12	3 50	Elec.	.....	
274	Jackson Automatic Coaster Co.....	"	Brakes.....	8	8	10	26 12	1 56	"	.....	
275	Jackson Casket Co.....	"	Caskets.....	4	4	10	26 12	2 00	"	.....	
276	Washington Street Mills.....	"	Flour, etc.....	3	3	10	26 12	2 00	St'm.	No		
277	D. D. Holden Milling Co.....	"	Feed.....	3	3	*11	26 12	2 00	Elec.	.....	
278	Central City Show Print Co.....	"	Bills.....	12	12	9	26 12	2 06	"	.....	
279	National Biscuit Co.....	"	Baked goods.....	25	24	9	26 12	1 04	St'm.	No		
280	C. A. Trask Machine Co.....	"	Machine w'rk.....	7	7	10	26 12	1 73	Elec.	.....	
281	Weeks Drug & Chemical Co.....	"	Drugs.....	12	12	10	26 12	90	Rent.	.....	
282	Crown Paper & Bag Co.....	"	Bags.....	15	15	8	26 12	1 27	Elec.	.....	
283	C. S. Reeves.....	"	Machine w'rk.....	3	3	8	26 12	2 00	"	.....	
284	Jackson Steam Dye Works.....	"	Dyed goods.....	4	4	10	26 12	1 69	St'm.	Yes		
285	Jackson Glass Works.....	"	Glass plate.....	20	15	9½	26 12	1 25	Rent.	.....	
286	Adler Bottling Co.....	"	Beer.....	8	8	*18	26 12	1 60	W't'r.	.....	
287	Jackson Flour Machine Co.....	"	Machinery.....	10	10	10	26 12	1 70	"	.....	
288	Taylor's Flouring Mill.....	"	Flour, etc.....	8	8	10	26 12	1 88	St'm.	No		
289	The McLaughlin Elevator Co.....	"	Grain, etc.....	56	56	10	26 8	80	Gas.	.....	
290	Eldred Milling Co.....	"	Flour, etc.....	18	15	*24	20 12	1 67	St'm.	No		
291	Jackson Pulp Co.....	"	Wood pulp.....	30	28	*24	26 12	1 83	"	.....	
292	Carl Langner Bakery Co.....	"	Baked goods.....	6	6	10	26 12	1 29	None	.....	
293	Industrial News Co.....	"	Newsp'rs, etc.....	10	7	9	26 12	1 02	Elec.	.....	
294	E. S. Bowman Shirt Co.....	"	Shirt waists.....	48	48	10	26 11	83	Rent.	.....	
295	White Steam Laundry.....	"	Laundry.....	35	35	10	26 12	87	St'm.	Yes		
296	Burr Oak Canning Co.....	Burr Oak...	Canned goods.....	55	55	10	26 3	82	"	No		
297	Hincher Manufacturing Co.....	"	Novelties.....	15	8	10	26 12	1 04	"	.....	
298	W. A. Thomas.....	"	Lumber.....	8	1	.....	.....	.....	.....	"
299	Sheffield Manufacturing Co.....	"	Planters.....	30	20	10	26 12	1 50	Gas.	.....	
300	Willer & Boyer.....	"	Feed.....	2	1	10	26 12	1 50	St'm.	No		

* Running day and night.

° Running 7 days per week.

* Running over 10 hours per day.

Inspection Book No. 7.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
301	Wager & Stewart.....	Williamston	Flour, etc.....	4	4	15	26	12	\$1.75	W't'r.	.....
302	Park & Heathman Mfg. Co.....	"	Lumber.....	4	4	10	26	12	1.50	St'm.	No
303	Roundsville & Greenway Elec. Co.....	"	Electricity.....	2	2	9	30	12	1.50	"	"
304	Michigan Milling Co.....	Howell	Beans, etc.....	84	33	10	26	12	76	None	.....
305	Howell City Mills.....	"	Flour.....	3	3	10	26	12	1.50	St'm.	No
306	Michigan Condensed Milk Co.....	"	Milk.....	120	120	10	26	12	1.13	"	Yes
307	Howell Mills.....	"	Flour, etc.....	6	6	6	26	12	1.50	"	No
308	A. Garland Manufacturing Co.....	"	Clothing.....	35	35	10	26	12	1.30	Gas	.....
309	Howell City Laundry.....	"	Laundry.....	2	2	12	26	12	1.50	None	.....
310	Culver Bros.....	"	Cigars.....	5	5	10	26	12	2.30	"	.....
311	Howell Steam Laundry.....	"	Laundry.....	5	5	10	26	12	92	St'm.	No
312	Livingston Democrat.....	"	Newspapers, etc.....	3	3	10	26	12	1.58	Gas	.....
313	Howell Electric and Power Co.....	"	Electricity.....	4	4	8	30	12	1.62	St'm.	No
314	Howell City Water Works.....	"	Water.....	2	2	24	30	12	1.75	"	"
315	J. W. Wright & Sons.....	"	Doors, etc.....	10	3	5	26	12	1.50	"	"
316	The Henry Greenway Lt. Co.....	Fowlerville	Electricity.....	2	2	7	30	12	1.50	"	"
317	The Livingston Flour Mills.....	"	Flour, etc.....	3	3	8	26	12	1.67	"	"
318	Brickhart City Mills.....	Leslie	" ".....	4	4	10	26	12	1.62	"	"
319	McLaughlin & Ward.....	"	Beans.....	75	4	10	26	12	1.50	"	"
320	Leslie Co-operative Creamery.....	"	Butter.....	4	4	14	26	12	1.20	"	"
321	Phoenix Mills.....	Mason	Flour.....	4	4	10	26	12	1.75	"	"
322	The Frank Seeley Elevator Co.....	"	Grain.....	2	2	10	26	12	"	Gas	.....
323	R. G. Coy & Co.....	"	" etc.....	4	4	8	26	12	1.12	"	"
324	Mason City Mills.....	"	Flour.....	4	3	10	26	12	1.33	St'm.	No
325	A. J. Hall Cold Storage Co.....	"	Eggs, etc.....	22	12	10	26	12	1.25	None	.....
326	Mason Creamery Co.....	"	Butter.....	3	3	9	26	12	2.50	St'm.	No
327	Mason Electric Co.....	"	Electricity.....	3	3	24	30	12	1.67	"	"
328	Mason Carriage Co.....	"	Carriages.....	14	11	10	26	12	1.36	"	"
329	Ingham County Democrat.....	"	Newspapers, etc.....	5	4	10	26	12	1.50	Gas	.....
330	Mason Cigar Co.....	"	Cigars.....	5	5	10	26	12	2.00	None	.....
331	Van Ostrand & Elmer.....	"	Beans.....	35	3	5	14	12	1.50	Gas	.....
332	E. A. Lake & Co.....	Holly	Grain.....	4	3	8	26	12	1.50	"	"
333	Cyclone Woven Wire Fence Co.....	"	Fence.....	14	9	10	26	12	1.50	"	"
334	Holly Electric Light & Power Co.....	"	Electricity.....	5	5	24	30	12	1.70	St'm.	No
335	Holly Milling Co.....	"	Flour, etc.....	36	36	24	26	12	1.78	"	"
336	Holly Cooperage Co.....	"	Barrels.....	11	11	10	26	12	1.60	"	"
337	Holly Handle & Wood Turning Co.....	"	Handles.....	10	10	10	26	12	1.50	"	"
338	H. J. Heinz Co.....	"	Pickles.....	50	14	10	26	12	1.34	"	"
339	Michigan Mfg. Lumber Co.....	"	Boxes, etc.....	80	80	10	26	12	1.25	"	"
340	Holly City Laundry.....	"	Laundry.....	5	5	18	26	12	1.00	Gas	.....
341	McGornal & Son.....	"	Castings.....	4	4	10	26	12	2.12	Rent.	.....
342	Star Laundry.....	Northville	Laundry.....	3	3	12	26	12	1.50	Elec.	.....
343	Peerless Laundry.....	"	".....	5	5	9	16	12	1.00	St'm.	No
344	J. A. Dubuar Manufacturing Co.....	"	Wh'lbarrrows.....	75	60	10	26	12	1.25	"	"
345	Globe Furniture Co.....	"	Furniture.....	70	70	10	26	12	1.71	"	"
346	American Shade Cloth Co.....	"	Shades.....	7	7	10	26	12	1.75	Rent.	.....
347	American Bell and Foundry Co.....	"	Bells, etc.....	17	17	10	26	12	1.32	"	"
348	Northville Dowel Co.....	"	Dowel pins.....	15	14	10	26	12	1.25	St'm.	No
349	Northville Milling Co.....	"	Flour, etc.....	5	5	11	26	12	1.40	"	"
350	South Lyons Milling Co.....	South Lyons	" ".....	5	4	10	26	12	1.88	"	"

* Running day and night.

• Not given.

o Running 7 days per week.

u Running over 10 hours per day.

Inspection Book No. 8.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
351	Northville Condensing Co.	Plymouth..	Butter, etc....	5	5	10	26 12	\$1 30	St'm.	No	
352	Clover Pasteurized Milk Co.	Northville..	Milk.....	6	5	9	26 12	1 15	"	Yes	
353	Det., Ply. & Northville Elec. R'y.	Plymouth..	Electricity....	9	9	18	30 12	1 71	"	Yes	
354	Bennett Fanning Mill Factory....	"	Mills, etc....	16	15	10	26 12	1 25	"	No	
355	The Daisy Manufacturing Co....	"	Air guns.....	72	72	10	26 12	1 47	"	Yes	
356	Markham Manufacturing Co....	Brighton...	" " ".....	107	107	10	26 12	1 50	"	No	
357	Galbraith's Brighton Mill.....	"	Flour, etc....	3	3	11	26 12	1 83	"	Yes	
358	J. P. Collins & Son.....	"	Castings, etc.	3	3	10	26 12	1 58	Gas..	....
359	Michigan Central R. R. shops....	Jackson...	Machine work..	441	441	10	26 12	1 62	St'm.	No	
360	Jackson Hat Co.....	"	Hats.....	6	6	10	26 12	1 50	None	....
361	G. H. Hatch.....	"	Repairs.....	3	3	10	26 12	1 92	Elec.	....
362	Jackson Daily Citizen.....	"	Printing.....	25	25	9	26 12	1 12	St'm.	Yes	
363	Central City Book Bindery.....	"	Binding.....	5	5	10	26 12	95	Elec.	....
364	Jackson Patriot & Even'g Press.	"	Newsp'rs, etc.	30	30	9	26 12	1 05	"	....
365	Elipse Governor Co.....	Vicksburg..	Governors....	12	6	9	26 12	1 25	St'm.	No	
366	Dentlor Bagger Co.....	"	Grain bagge's	8	8	9	26 12	1 70	"	"	
367	C. & G. T. R. R. Pump Station....	"	Water.....	2	2	14	30 12	1 50	"	"	
368	Vicksburg Electric Co.....	"	Electricity....	2	2	24	30 12	1 85	"	"	
369	Clark Bros.....	"	Alarms.....	7	7	10	26 12	2 00	"	Yes	
370	Ann Arbor Courier.....	Ann Arbor..	Newsp'rs, etc.	30	30	10	26 12	1 00	"	No	
371	Van Kleek & Son.....	"	Shirts.....	8	8	10	26 12	1 00	Rent.	....
372	Ann Arbor Electric Co.....	"	Electricity....	8	8	24	30 12	2 13	St'm.	No	
373	Hay & Todd Manufacturing Co....	"	Underwear....	75	75	10	26 12	75	"	"	
374	Electric Granite Works.....	"	Monuments....	5	5	10	26 12	3 00	Elec.	....
375	Luick Bros.....	"	Doors, etc....	12	12	10	26 12	1 40	St'm.	No	
376	Michigan Milling Co., No. 1.....	"	Flour, etc....	8	8	10	26 12	1 70	W't'r.	....
377	Ann Arbor Agricultural Co.....	"	Implements....	65	20	9	26 12	1 60	S&W	No	
378	Michigan Milling Co., No. 2.....	"	Flour, etc....	8	8	10	26 12	1 70	St'm.	....
379	Ann Arbor Brewing Co.....	"	Beer.....	9	9	12	26 12	2 00	"	Yes	
380	Ferguson Buggy Co.....	"	Buggies.....	20	12	10	26 12	2 00	Gas..	....
381	The Krapf Manufacturing Co....	"	Bld'g mater'l.	12	4	10	26 10	1 75	St'm.	Yes	
382	Ann Arbor Water Co.....	"	Water.....	4	4	24	30 12	2 06	"	"	
383	Michigan Milling Co., No. 3.....	"	Flour, etc....	12	12	10	26 12	1 70	"	No	
384	T. L. Sutter.....	"	Repairs.....	4	4	10	26 12	2 25	Elec.	....
385	Toledo & A. A. Pumping Station	"	Water.....	2	2	20	30 12	1 50	St'm.	No	
386	C. Sauers & Co.....	"	Lumber.....	8	6	10	26 12	1 40	"	"	
387	The O. K. Manufacturing Co.....	"	Water closets	10	10	10	26 12	1 60	"	"	
388	Ann Arbor Manufacturing Co....	"	Trimnings....	10	5	10	26 12	1 20	S & E	"	
389	Western Brewing Co.....	"	Beer.....	5	4	10	26 12	2 00	St'm.	"	
390	Michigan Furniture Co.....	"	Furniture....	75	70	10	26 12	1 07	"	Yes	
391	Ann Arbor Organ Co.....	"	Organs.....	78	78	10	26 12	1 28	"	"	
392	The Star Laundry.....	"	Laundry.....	4	4	10	26 12	1 12	None	....
393	Daily Argus.....	"	Newsp'rs, etc.	11	11	10	26 12	1 35	Elec.	....
394	The Daily Times.....	"	"	6	6	10	26 12	1 50	"	"	
395	The Charlotte Electric Co.....	Charlotte..	Electricity....	4	4	12	30 12	1 50	St'm.	No	
396	Heinzman & Lanbengayer.....	Ann Arbor..	Feed.....	3	1	"	"	"	"	"	
397	Dubel Bros.' Huron Mills.....	Ypsilanti..	Feed, etc....	5	5	10	26	1 60	W't'r.	....
398	Detroit, Ypsl. & A. A. Elec. R'y.	"	Electricity....	7	7	20	30	2 00	St'm.	No	
399	" " " " " " " " " " "	"	Repairs.....	11	11	10	30	1 75	Elec.	....
400	Michigan Manufacturing Co.....	"	Brass work....	25	14	10	26	1 79	St'm.	Yes	

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 9.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is in good condition?
401	The Crescent Corset Co.....	Ann Arbor.	Corsets.....	25	22	9	26 12	\$0 73	Elec.	....
402	C. F. Heyser.....	"	Cigars.....	7	6	8	26 12	2 00	None	....
403	E. B. McCullough Co.....	Ypsilanti...	Castings.....	6	4	10	26 12	2 25	St'm.	No	
404	Ainsworth-Bachelor Co.....	"	Flour, etc.....	35	30	10	26 8	96	"	Yes	
405	Ypsilanti Gas Co.....	"	Gas.....	4	4	10	30 12	1 50	"	"	
406	Worden & Whitman Co.....	"	Repairs.....	15	3	10	26 12	1 50	Gas..	....
407	Ypsilanti Machine Works.....	"	Machinery.....	25	20	10	26 13	1 75	St'm.	Yes	
408	Washtenaw Electric Co.....	"	Electricity.....	3	3	24	30 12	1 67	"	"	
409	C. W. Dickinson.....	"	Ax helves.....	8	8	10	26 12	1 88	"	"	
410	Deubel & Co.....	"	Flour, etc.....	5	5	15	26 12	1 50	S&W	"	
411	Hay & Todd Manufacturing Co..	"	Underwear...	175	175	10	26 12	72	St'm.	No	
412	Peninsular Paper Co.....	"	Paper.....	70	70	24	26 12	1 30	"	Yes	
413	Webster, Cobb & Co.....	"	Lumber.....	9	9	10	26 12	1 67	"	"	
414	L. Z. Foerster Co.....	"	Beer.....	11	11	10	26 12	2 00	"	"	
415	City Water & Electric Light Co.	"	Electricity...	3	3	24	30 12	2 00	"	No	
416	Ypsilanti Manufacturing Co.....	"	Hammers, etc	9	9	10	26 12	1 56	"	Yes	
417	Ypsilanti Dairy Association.....	"	Butter.....	6	6	14	26 12	1 75	"	"	
418	Ypsilanti Dress Stay Co.....	"	Dress stays..	50	29	10	26 12	1 21	"	"	
419	Scharf Tag, Label & Box Co.....	"	Tags, etc.....	75	75	10	26 12	80	"	"	
420	White Laundry Co.....	"	Laundry.....	10	10	10	26 12	95	Elec.	....
421	H. R. Scoville.....	"	Doors, etc.....	8	6	9	26 12	1 37	St'm.	No	
422	Wayne Flouring Mill.....	Wayne.....	Flour, etc.....	4	4	10	26 12	1 62	"	"	
423	Prouty & Glass Mfg. Co.....	"	Carriages.....	125	124	10	26 12	1 27	"	"	
424	Washington Cigar Co.....	"	Cigars.....	10	9	9	26 12	1 33	None	....
425	G. A. Fleischer.....	"	".....	5	4	9	26 12	1 50	"	"	
426	D., Y. & A. A. Electric R'y Co...	Dearborn...	Electricity....	6	6	18	30 12	2 00	St'm.	No	
427	D., Y. & A. A. R'y shops.....	"	Repairs.....	5	5	10	30 12	1 50	Rent.	....
428	A. Wagner Brick Co.....	"	Brick.....	22	22	10	26 12	1 68	St'm.	No	
429	Chelsea Mfg. Co.....	Chelsea.....	Brass goods..	6	6	10	26 12	1 42	Elec.	....
430	Glazier Stove Works.....	"	Stoves.....	100	65	10	26 12	1 25	Rent.	....
431	Municipal Lighting Co.....	"	Electricity....	3	3	18	30 12	1 53	St'm.	No	
432	Chelsea Steam Laundry.....	"	Laundry.....	5	5	12	26 12	1 30	Gas..	....
433	Chelsea Roller Mills.....	"	Flour, etc.....	3	3	10	26 12	1 53	St'm.	No	
434	H. Lighthall Planing Mill.....	"	Lumber.....	6	6	10	26 6	1 50	"	"	
435	J. P. Wood & Co.....	"	Beans.....	60	6	10	26 8	1 42	Gas..	....
436	Welch Elevator Co.....	"	Grain.....	3	3	8	26 12	1 50	Elec.	....
437	Newton & Haggerty Co.....	Springwells	Ladders.....	20	20	10	26 12	1 30	St'm.	No	
438	The Haggerty Brick Co.....	"	Brick.....	15	15	11	26 7	1 92	"	"	
439	Geo. Clippert & Bro., No. 1.....	"	".....	27	27	10	26 8	1 95	"	"	
440	Hall Brick Co.....	"	".....	18	18	8	26 8	1 91	"	Yes	
441	A. Lonyo.....	"	".....	26	26	8	26 7	1 80	"	No	
442	Wolf Brick Co.....	"	".....	40	40	8	26 8	1 80	"	Yes	
443	Geo. H. Clippert & Bro., No. 2..	"	".....	30	30	9	26 8	1 65	"	"	
444	Proctor Bros.' Brick Co.....	"	".....	22	22	9	26 6	1 98	"	"	
445	D. Burke Brick Co.....	"	".....	20	20	9	26 7	1 85	"	No	
446	Lonyo Bros.....	"	".....	35	35	11	26 8	1 70	"	"	
447	Cardoni Monument Co.....	Woodmere.	Monuments..	8	4	9	26 11	2 00	Elec.	....
448	Henry Lemmer & Co.....	"	".....	5	4	9	26 12	2 25	None	....
449	Frank W. Peel.....	"	".....	4	4	9	26 12	2 50	"	....
450	Wynkoop, Hallenbeck, Crawford Co.	Lansing....	Printing.....	90	75	9	26 6	2 00	St'm.	No	

* Running day and night.

° Running 7 days per week.

u Running over 10 hours per day.

Inspection Book No. 10.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
451	Gale Manufacturing Co.....	Albion	Farm imp.	325	275	10	26	12	\$1 45	St'm	Yes
452	Albion Milling Co.....	"	Flour, etc.	35	27	24	26	12	1 41	S&W	"
453	Albion Recorder.....	"	Newsp'rs, etc.	2	2	10	26	12	1 11	Gas.	"
454	Albion Mirror.....	"	"	5	5	10	26	12	50	"	"
455	W. H. Green & Co.....	"	Printing.....	7	7	10	26	12	71	"	"
456	T. J. Furey.....	"	Cigars.....	10	10	8	26	11	1 00	None	"
457	Wm. E. Baldwin.....	"	"	15	10	8	26	12	1 00	"	"
458	Superior Steam Laundry	"	Laundry.....	9	9	10	26	12	46	St'm	No
459	Albion Electric Light Co.....	"	Electricity.....	4	4	12	30	12	1 87	"	"
460	City Roller Mills.....	"	Flour.....	3	3	8	26	12	1 39	W'r.	"
461	Groff & Herrick.....	"	Building mat.	20	20	10	26	8	1 45	St'm	No
462	Albion City Water Works.....	"	Water.....	3	3	24	30	12	1 75	"	"
463	Albion Buggy Co.....	"	Carriages.....	40	33	10	26	12	1 42	"	"
464	Albion Wind Mill and Imp. Co.....	"	Windmills.....	15	15	9	26	12	1 11	"	"
465	Olds & Hough.....	"	Engines.....	7	1	"	"	"	"	Gas.	"
466	Union City Laundry.....	Union City.	Laundry.....	4	4	8	26	12	92	St'm	No
467	W. L. Raymond.....	"	Machinery.....	2	2	10	26	12	1 50	Gas.	"
468	Boyer & Lowell.....	"	Lumber.....	10	1	"	"	"	"	St'm	No
469	B. F. Green.....	"	Machinery.....	1	1	10	26	12	2 00	"	"
470	Peerless Portland Cement Co.....	"	Cement.....	130	116	24	30	12	1 81	"	"
471	M. P. Maxon.....	"	Lumber.....	12	1	"	"	"	"	"	"
472	Union City Elec. Lt. & Wr. Wks.	"	Water, etc.....	3	3	24	30	12	1 39	"	"
473	Colon Steam Laundry.....	Colon.....	Laundry.....	4	4	10	26	12	1 50	"	"
474	Colon Roller Mills.....	"	Flour.....	4	3	12	26	12	1 30	S&W	"
475	Lamb Knit Goods Co.....	"	Knit goods.....	215	215	10	26	12	93	St'm	"
476	L. J. Knauss.....	Three Riv'rs	Harnesses.....	20	16	10	26	12	1 56	Elec.	"
477	W. W. Barton.....	"	Cigars.....	4	4	8	26	12	1 66	None	"
478	Initial Toe Pad Co.....	"	Carriages.....	50	35	10	26	12	1 67	Elec.	"
479	News Reporter.....	"	Newsp'rs, etc.	3	3	10	26	12	83	Gas.	"
480	H. B. Lutz.....	White Pigeon..	Feed.....	1	1	10	26	12	1 50	"	"
481	J. M. Medding.....	"	Lumber.....	5	1	"	"	"	"	St'm	No
482	Sultan Buggy Cart Co.....	"	Carriages.....	40	25	10	26	12	1 33	None	"
483	Baldwin & Gawthrop.....	Sturgis	Laundry.....	5	5	10	26	12	1 33	St'm	No
484	Herridge Shear Co.....	"	Shears.....	40	40	10	26	12	1 15	"	Yes
485	Aulsbrook & Sturges.....	"	Furniture.....	90	83	10	26	12	1 30	"	No
486	Miller & Hubbard Mfg. Co.....	"	Fixtures.....	65	50	10	26	12	1 16	"	Yes
487	Grobhiser & Grosby.....	"	Furniture.....	125	95	10	26	12	1 11	"	"
488	J. H. Whitmer.....	"	Sash, etc.....	6	6	10	26	10	1 40	"	No
489	Sturgis Journal.....	"	Newsp'rs, etc.	2	2	10	26	12	1 00	None	"
490	Royal Chair Co.....	"	Chairs.....	50	50	10	26	12	1 35	St'm	No
491	Sturgis Water Works.....	"	Water, etc.....	2	2	24	30	12	1 58	"	"
492	Augusta Basket Co.....	Augusta	Baskets.....	42	26	10	26	8	85	"	"
493	American Handle Co.....	"	Handles.....	9	1	"	"	"	"	"	"
494	Augusta Times.....	"	Newsp'rs, etc.	3	3	8	26	12	1 33	None	"
495	J. Hudson.....	"	Produce.....	20	4	10	26	12	1 50	St'm	No
496	Augusta Mills.....	"	Feed.....	2	1	"	"	"	"	W'r.	"
497	Standard Manufacturing Co.....	Galesburg..	Windmills.....	6	2	10	26	12	1 50	St'm	No
498	Ford Printing Co.....	"	Printing.....	6	4	10	26	12	1 04	Gas.	"
499	A. K. Zinn.....	"	Flour.....	3	3	10	26	12	1 11	S&W	No
500	Galesburg Enterprise.....	"	Newsp'rs, etc.	3	3	10	26	12	67	Gas.	"

* Running day and night.

° Running 7 days per week.

" Running over 10 hours per day.

Inspection Book No. 11.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. I for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
501	G. A. Raupp & Co.	Ecorse....	Lumber.....	70	14	10	26	12	\$1 49	St'm.	Yes
502	Solvay Process Co.	Delray....	Soda.....	1000	1600	* 24	30	12	1 66	"	No
503	Michigan Malleable Iron Co.	"	Castings.....	700	350	9	26	12	1 56	"	Yes
504	The W. F. Hurd Co.	"	Finish.....	40	33	10	26	12	1 52	"	No
505	Exposition Brewing Co.	"	Beer.....	10	10	9	26	12	3 33	"	"
506	Detroit Lath Co.	"	Lath.....	6	6	10	26	12	1 05	"	"
507	La Measure Bros.	"	Laundry.....	13	13	10	26	12	1 90	"	"
508	Delta Lumber Co.	"	Lumber.....	19	19	10	26	12	1 50	"	"
509	Fisher Bros.	"	Glue, etc.....	55	53	* 24	30	8	1 92	"	"
510	Detroit Sulphite Fibre Co.	"	Paper, etc.....	100	100	* 24	26	12	1 30	"	Yes
511	Sutton Manufacturing Co.	"	Tubs, etc.....	50	I	.....	.....	.....	.....	.....	.....
512	W. B. Ewing & Son	"	Lumber.....	18	12	10	26	12	1 40	St'm.	No
513	Parker's Horse Tannery	"	Rendering.....	3	3	10	26	12	1 25	"	"
514	Salliotte & Ferguson.	Riv'r Rouge	Lumber.....	60	60	10	26	12	1 40	"	"
515	Brownlee & Co.	"	" ete ..	175	150	10	26	12	1 22	"	"
516	Metzger Percolating Co.	"	Oils.....	2	I	.....	.....	.....	.....	"	"
517	Townsend & Brooks.	Nashville...	Flour, etc.....	3	3	10	26	12	1 33	"	Yes
518	Brooks & Smith.	"	Butter, etc.....	3	2	10	26	12	1 33	"	No
519	W. E. Shields.	"	Windmills.....	2	2	9	26	12	1 50	"	"
520	M. B. Brooks.	"	Evaporating.	70	50	10	26	4	80	"	"
521	Lentz Table Co.	"	Tables.....	70	40	10	26	12	1 04	"	"
522	H. R. Dickinson.	"	Flour, etc.....	10	3	10	26	12	1 25	"	"
523	Nashville Roller Mills.	"	" ".....	2	1	10	26	12	1 67	W't'r	.....
524	Nashville Water Works.	"	Water.....	2	1	10	30	12	1 00	St'm.	No
525	I. N. Kellogg.	"	Lumber.....	4	I	.....	.....	.....	.....	.....	.....
526	J. E. Taylor.	"	Machinery.....	5	2	10	26	12	1 50	St'm.	No
527	The Verdon Cigar Co.	Kalamazoo.	Cigars.....	42	26	8	26	12	1 06	None	.....
528	William Boston.	Nashville...	Brick.....	10	10	12	26	2	1 25	St'm.	No
529	A. C. Buxton.	"	Machinery.....	6	I	.....	.....	.....	.....	"	"
530	City Laundry.	"	Laundry.....	4	2	9	26	12	1 08	None	.....
531	J. B. Marshall.	"	Grain.....	2	2	10	26	12	1 33	Gas.	.....
532	Rawson & Slout.	Vermontville...	Lumber.....	2	2	9	26	5	1 50	St'm.	No
533	S. A. Fuller.	"	".....	5	I	.....	.....	.....	.....	"	"
534	H. S. Rauch.	"	Flour.....	6	4	* 24	26	12	1 38	"	"
535	W. H. Benedict.	"	Grain.....	2	2	10	26	12	1 25	"	"
536	Vermontville Creamery Co.	"	Butter.....	2	2	* 12	30	12	1 50	"	"
537	T. D. French & Son.	Middleville	Flour.....	8	8	* 24	26	12	1 66	W't'r	.....
538	Keeler Brass Co.	"	Brass goods..	125	60	10	26	12	1 25	S&W	No
539	Cassopolis Steam Laundry.	Cassopolis..	Laundry.....	4	3	10	26	12	1 11	Gas.	.....
540	Cold Spring Creamery.	Middleville	Butter.....	2	2	10	30	12	1 75	St'm.	No
541	Ed. Baker.	Hastings....	Cigars.....	6	2	8	26	12	1 65	None	.....
542	George Hubbard.	"	Lumber.....	4	4	10	26	8	1 50	St'm.	No
543	Hastings Rustic Co.	"	Rustic goods.	4	2	9	26	5	1 50	None	.....
544	Hastings Wool Boot Co.	"	Wool boots...	170	160	* 20	26	12	1 25	St'm.	No
545	International Seal Lock Co.	"	Seals, etc.....	19	11	10	26	12	1 74	Rent.	.....
546	Hastings Table Co.	"	Tables.....	80	60	10	26	12	1 05	St'm.	No
547	H. A. Newton.	"	Feed, etc.....	5	2	10	26	12	1 25	W't'r	.....
548	Hastings Engine & Iron Works.	"	Foundry work	20	5	10	26	12	1 16	St'm.	No
549	F. H. Barlow & Co.	"	Feed.....	3	3	10	26	12	1 50	"	Yes
550	Hastings Roller Mills.	"	Flour.....	4	4	10	26	12	1 66	"	No

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 12.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employes when running full capacity.		Number of employes at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
551	Hastings Water Works.....	Hastings...	Water.....	3	3	24	0	30	12	\$1 53	St'm.	Yes
552	R. K. Grant.....	"	Grain.....	1	1	10	26	12	83	Gas..	"	"
553	Hastings Elec. Light & Power Co	"	Electricity...	3	3	12	0	30	12	1 55	St'm.	No
554	Hastings Journal.....	"	Newsp'r's, etc.	4	4	10	26	12	1 00	"	"	"
555	Hastings Herald.....	"	"	5	5	10	26	12	1 00	Gas..	"	"
556	American Laundry.....	"	Laundry.....	5	5	10	26	12	66	St'm.	No	"
557	Hastings Banner.....	"	Newsp'r's, etc.	8	6	10	26	12	75	Gas..	"	"
558	A. Black & Son.....	"	Marble works	8	7	10	26	12	1 80	None	"	"
559	Bentley, Rider & Tomlinson.....	"	Chairs.....	8	6	10	26	12	1 16	St'm.	No	"
560	Green & Early.....	"	Foundry w'k.	9	4	10	26	12	2 00	Rent.	"	"
561	Upjohn Manufacturing Co.....	"	Buggy bodies	30	30	10	26	12	1 52	St'm.	No	"
562	Delton Roller Mills.....	Delton	Flour.....	3	3	11	26	12	1 38	"	"	"
563	Joppa Creamery.....	Joppa	Butter.....	1	1	16	0	30	12	1 12	"	"
564	David L. Swain.....	East Leroy.	Feed.....	2	2	10	26	12	1 25	"	"	"
565	Eldred Mill Co.....	Athens.....	Grain.....	1	1	9	26	12	1 25	Gas..	"	"
566	E. D. Greenfield.....	"	Flour.....	5	4	10	26	12	1 04	S&W	No	"
567	Athens Electric Co.....	"	Electricity...	2	2	10	0	30	12	1 50	Rent.	"
568	P. I. Simmons.....	"	Grain.....	2	2	10	26	12	1 50	Gas..	"	"
569	Snyder & Doran.....	"	Lumber.....	25	24	10	26	11	97	St'm.	No	"
570	J. J. Wells.....	"	Ice cream.....	2	2	10	26	6	1 25	"	"	"
571	J. L. Sebring & Co.*	Schoolcraft.	Grain.....	3	2	10	26	12	1 54	"	"	"
572	Am. Photo. Supply and Mfg. Co.	"	Photo. sup...	20	18	10	26	12	70	"	"	"
573	W. J. Thomas & Co.....	"	Grain.....	2	1	9	26	12	96	"	"	"
574	Adam Buttell & Sons Piano Co.	"	Pianos.....	25	1	10	26	12	1 73	"	"	"
575	H. L. Hoover.....	Marcellus..	Lumber.....	4	2	10	26	12	1 73	"	"	"
576	Marcellus Water Works Co.....	"	Water.....	1	1	24	0	30	12	1 10	"	"
577	H. L. Chapman.....	"	Foundry w'k.	4	2	10	26	12	1 38	Gas..	"	"
578	Marcellus Milling Co.....	"	Flour.....	10	10	11	26	12	1 80	St'm.	No	"
579	John M. Ingraham.....	"	Grain cradles	15	15	10	26	12	1 00	"	"	"
580	C. W. Willson.....	"	Lumber.....	8	8	10	26	8	1 88	"	Yes	"
581	C. E. Carpenter.....	"	Grain.....	2	1	9	26	12	85	"	No	"
582	Thompkins & Bonie.....	Cassopolis..	"	2	1	10	26	12	1 00	"	"	"
583	C. W. Bunn.....	"	Lumber.....	10	7	10	26	10	1 93	"	"	"
584	Cassopolis Manufacturing Co.....	"	Drills.....	40	40	10	26	6	1 88	"	Yes	"
585	J. Hopkins.....	"	Lumber.....	4	1	9	12	12	1 35	Rent.	"	"
586	Cassopolis Milling Co.....	"	Flour, etc....	8	5	24	0	30	12	1 50	St'm.	No
587	J. L. Yost.....	"	Cider.....	4	4	10	26	3	1 00	"	"	"
588	Coulter & Hadsell.....	"	Grain.....	2	1	10	26	12	1 25	Gas..	"	"
589	G. L. McLain & Co.....	Edwardsb'g.	"	2	2	10	26	12	1 50	St'm.	No	"
590	Edwardsburg Mill.....	"	Flour.....	2	2	10	26	12	1 50	"	"	"
591	S. & G. Lacey.....	Niles.....	Cooperage....	10	2	10	26	5	1 50	"	"	"
592	Freeland Manufacturing Co.....	"	Steel tanks...	15	14	10	26	12	1 10	Gas..	"	"
593	Niles Gas Co.....	"	Gas.....	2	2	24	0	30	12	1 44	St'm.	No
594	W. J. Welling & Son.....	"	Machinery....	10	7	10	26	12	1 50	"	"	"
595	Earl Storms Co.....	"	Specialties...	20	15	10	26	12	1 11	"	"	"
596	J. L. Reddick.....	"	Dressed lum.	6	1	10	26	8	1 21	"	"	"
597	The Geo. L. Warren Co.....	"	Splints.....	6	5	10	26	8	1 21	"	"	"
598	W. A. Reddick.....	"	Specialties...	30	21	10	26	12	1 03	"	"	"
599	A. C. Waterman.....	Athens.....	Lumber.....	3	2	10	26	12	1 25	"	"	"
600	Merrill-Stevens Mfg. Co.....	Niles.....	Guards.....	15	9	10	26	12	1 60	"	"	"

* Running day and night.

° Running 7 days per week.

° Running over 10 hours per day.

Inspection Book No. 13.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
601	Lonyo Brick Co.....	Springwells	Brick.....	21	21	8	26	7	\$2.00	St'm.	Yes
602	Burns & O'Shea Brick Co.....	"	"	20	20	10	26	6	1.80	"	No
603	The R. H. Hall Brick Co.....	W. Detroit.	"	130	130	10	26	8	1.73	"	Yes
604	M. C. R. R. Car Shops.....	"	Cars	500	420	10	26	12	1.34	"	No
605	Michigan Brass & Iron Works.....	"	Valves.....	200	200	10	26	12	2.48	"	Yes
606	The Daniels Brick Co.....	"	Brick.....	22	22	10	26	8	1.70	"	No
607	Downey & Co.....	"	"	21	21	9	26	7	1.65	"	Yes
608	S. Pratt & Son.....	"	"	25	25	9	26	8	1.60	"	"
609	Larkins Brick Co.....	"	"	25	10	8	20	5	1.50	"	"
610	John McDonald & Son.....	"	"	30	26	10	26	6	1.50	"	"
611	E. Howland & Son.....	Pontiac.....	Castings.....	10	10	10	26	12	2.00	"	No
612	Howland Manufacturing Co.....	"	Farm imp.....	25	16	9	26	11	1.50	"	Yes
613	Wolverine Carriage Co.....	"	Carriages.....	30	30	10	26	12	1.50	Gas.	"
614	Pontiac Knitting Works Co.....	"	Knit goods.....	30	20	10	26	12	1.40	St'm.	No
615	Empire Steam Laundry.....	"	Laundry.....	7	7	10	26	12	1.00	"	Yes
616	Pontiac Gazette.....	"	Newsp'r's, etc.....	9	9	10	26	12	1.55	Gas.	"
617	Pontiac Brewing Co.....	"	Beer.....	5	5	10	26	12	2.55	St'm.	Yes
618	R. D. Scott.....	"	Carriages.....	150	104	10	26	12	1.28	"	"
619	Pontiac Gas Works.....	"	Gas.....	2	2	10	30	12	1.83	"	No
620	Pontiac Spring & Wagon Co.....	"	Wagons, etc.....	70	70	10	26	12	1.65	"	Yes
621	John Bell & Sons.....	"	Doors, etc.....	9	9	10	26	12	2.00	"	No
622	O. J. Beaudette & Co.....	"	Woodwork.....	127	127	10	26	12	1.47	"	"
623	Pontiac Water Works.....	"	Water.....	3	3	12	30	12	2.22	"	"
624	Pontiac Standard Lighting Co.....	"	Electricity.....	2	2	5	30	12	1.83	"	Yes
625	Pontiac Axle Co.....	"	Axles.....	46	46	10	26	12	1.80	"	"
626	Andrews & Nelson.....	"	Woodwork.....	3	3	10	26	12	1.66	"	No
627	A. A. Baumgartner.....	"	Buggy bodies.....	14	14	10	26	12	1.50	"	"
628	Pontiac Buggy Co.....	"	Buggies.....	185	185	10	26	12	1.25	"	Yes
629	Dunlap Vehicle Co.....	"	Carriages.....	50	50	10	26	12	1.86	Rent.	"
630	C. V. Taylor.....	"	"	150	55	10	26	12	1.35	St'm.	No
631	Oakland Journal.....	"	Newsp'r's, etc.....	6	6	9	26	12	1.42	Elec.	"
632	Detroit & Pontiac Electric R'y.....	Birmingham	Electricity.....	6	6	24	30	12	2.00	St'm.	Yes
633	Detroit & Pontiac Electric R'y.....	"	Car repairs.....	15	15	10	30	12	1.67	"	"
634	Mascotte Cigar Co.....	Pontiac.....	Cigars.....	18	8	9	26	12	1.60	None	"
635	News & Times Co.....	"	Newsp'r's, etc.....	2	2	9	26	12	1.50	Elec.	"
636	Vehicle & Imp. Spring Co.....	"	Springs.....	75	20	10	26	2	1.33	St'm.	Yes
637	Mt. Clemens Brewing Co.....	Mt. Clemens	Beer.....	5	5	9	26	12	2.00	"	No
638	Clementine Bath House.....	"	Water.....	3	1	16	30	12	1.50	"	"
639	Lee Printing Co.....	"	Printing.....	4	4	9	26	12	1.12	Gas.	"
640	Gutshaw & Beattie.....	"	Sash, etc.....	15	15	10	26	12	1.50	St'm.	No
641	Mt. Clemens City Mill.....	"	Flour.....	8	7	10	26	12	1.65	"	"
642	T. W. Snook & Son.....	"	Stoves, etc.....	70	70	11	26	12	1.30	"	"
643	Donaldson Bros.....	"	Farm imp.....	100	75	10	26	12	1.30	"	"
644	Park Bath House Co.....	"	Water.....	3	3	10	26	12	1.33	"	"
645	Avery House Bath House.....	"	"	2	2	12	30	12	1.88	"	"
646	The Original Bath Co.....	"	"	2	2	12	30	12	1.50	"	"
647	Michigan Wood Pulp Co.....	Niles.....	Paper.....	225	225	24	30	12	95	S & W	"
648	Schwabach Garment Co.....	"	Waists.....	42	42	10	26	7	80	Gas.	"
649	Niles Board & Paper Co.....	"	Paper.....	150	100	24	30	12	83	S & W	No
650	J. S. Tuttle.....	"	Specialties.....	35	34	10	26	12	90	W'tr	"

* Running day and night.

° Running 7 days per week.

u Running over 10 hours per day.

Inspection Book No. 14.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
651	Skalla Furniture Co.....	Niles.....	Furniture.....	20	18	10	26	12	\$1 50	St'm.	No
652	M. Subber.....	".....	Repairs.....	3	2	10	26	12	1 17	W'r.	....
653	Chicago Envelope Clasp Co.....	".....	Clasps, etc.....	17	10	10	26	9	58	"	No
654	The Kate W. Nobles Mfg. Co.....	".....	Gum.....	5	4	9	26	12	81	None	....
655	Lakeside Knitting Co.....	".....	Knit goods.....	30	30	9 1/2	26	8	75	St'm.	No
656	Niles Milling Co.....	".....	Flour.....	15	11	10	26	12	2 00	W'r.	....
657	Kompass & Stoll.....	".....	Tables, etc.....	30	27	10	26	12	1 54	St'm.	No
658	J. Yauchstetter.....	".....	Cigars.....	3	2	8	26	12	1 54	None	....
659	Municipal Light and Water Co.....	".....	Water.....	3	3	24	30	12	1 67	W'r.	....
660	East Steam Laundry.....	".....	Laundry.....	5	2	8	26	12	91	St'm.	No
661	City Laundry.....	Dowagiac.....	".....	3	2	10	26	6	1 00	"	"
662	Eureka Steam Laundry.....	".....	".....	9	7	10	26	12	1 19	"	"
663	Dowagiac Canning Co.....	".....	Canned goods.....	150	130	12	26	4	1 41	"	"
664	Dowagiac Manufacturing Co.....	".....	Drills.....	250	150	10	26	10	1 66	"	"
665	Graham & Jessop.....	".....	Tables, etc.....	6	6	10	26	6	2 00	"	"
666	Wm. Hislop.....	".....	Lumber.....	6	1	....	....	....	....	....	....
667	Standard Cabinet Co.....	".....	Furniture.....	10	10	10	26	9	1 60	St'm.	No
668	Wm. M. Farr.....	".....	Sand bands.....	2	1	10	26	12	1 50	Rent.	....
669	Colby Milling Co.....	".....	Flour.....	12	12	24	30	12	1 67	S & W	No
670	Estate of P. D. Beckwith.....	".....	Stoves.....	535	535	10	26	12	1 68	St'm.	"
671	L. C. Biglow.....	".....	Printing.....	2	1	10	26	12	50	Gas.	....
672	Comstock Manufacturing Co.....	Comstock.....	Engines.....	25	24	10	26	12	1 39	W'r.	....
673	Perfection Manufacturing Co.....	River Rouge.....	Toothpicks.....	1	1	....	....	....	....	St'm.	Yes
674	Dwight Lumber Co.....	Delray.....	Lumber.....	335	300	9 1/2	26	12	1 00	"	"
675	Michigan Carbon Works.....	".....	Fertilizer.....	400	250	24	30	12	1 53	"	No
676	Wabash Railway Shops.....	".....	Repairs.....	38	30	10	30	12	1 11	"	"
677	Wabash Railway Shops.....	".....	Woodwork.....	45	40	10	30	12	1 53	None	....
678	Michigan Alkali Co. No. 1.....	Wyandotte.....	Soda ash.....	1300	525	24	30	12	1 33	St'm.	Yes
679	Michigan Alkali Co. No. 2.....	".....	".....	650	625	24	30	12	1 33	"	"
680	Michigan Alkali Co.....	Bellevue.....	Crushed stone.....	100	100	10	26	12	1 54	"	No
681	The J. B. Ford Co.....	Wyandotte.....	Starch.....	75	50	10	26	12	77	"	"
682	D. H. Burrell & Co.....	".....	Hoops.....	90	90	10	26	10	1 54	"	Yes
683	Eureka Brewing Co.....	".....	Beer.....	6	4	13	26	12	1 92	"	No
684	Wyandotte Water Works.....	".....	Water, etc.....	6	6	24	30	12	1 67	"	"
685	J. H. Bishop.....	".....	Rugs.....	200	200	10	26	12	83	"	Yes
686	Classon & Co.....	".....	Sash, etc.....	4	4	10	26	12	1 62	"	No
687	Wyandotte Brewing Co.....	".....	Beer.....	10	10	24	30	12	1 91	"	"
688	Wyandotte City Mills.....	".....	Flour.....	2	2	10	26	12	1 08	"	"
689	Wyandotte Herald.....	".....	Newsp'rs, etc.....	3	3	9	26	12	1 33	Rent.	....
690	Niagara Steam Laundry.....	".....	Laundry.....	8	7	10	26	12	1 14	St'm.	No
691	Beals & Selkirk.....	".....	Trunks.....	125	120	10	26	12	1 32	"	"
692	Gardner Bros.....	".....	Repairs.....	4	4	10	26	12	1 44	Gas.	....
693	Detroit Ship Building Works.....	".....	Boats.....	700	200	10	26	12	1 67	St'm.	No
694	John Tirfert.....	Trenton.....	Meat.....	3	3	4	26	12	1 25	"	"
695	Bronson Portland Cement Co.....	Bronson.....	Cement.....	80	80	24	30	12	1 67	"	Yes
696	A. L. Hibbard.....	Sturgis.....	Feed.....	3	2	10	26	12	1 67	"	No
697	Sturgis Electric Light Co.....	".....	Electricity.....	1	1	12	30	12	1 50	"	"
698	P. T. Eddy.....	Coldwater.....	Cigars.....	4	3	8	26	12	1 00	None	....
699	A. J. Pierce.....	".....	".....	12	12	8	26	12	1 67	"	"
700	Payne & Williams.....	".....	".....	5	5	8	26	12	1 16	"	"

* Running day and night.

° Running 7 days per week.

° Running over 10 hours per day.

Inspection Book No. 15.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
701	Pleasure Yacht Works	Wyandotte.	Boats	14	2	10	26 12	\$2 00	None	....	....
702	Detroit River Boat and Oar Co.	Trenton	"	5	1	10	26 12	1 25	"	....	....
703	Sibley Quarry Co.	"	Stone	300	300	10	26 12	1 53	St'm.	Yes	Yes
704	Aetna Cooperage Co.	"	Hoops, etc.	50	35	10	26 8	1 40	"	No	No
705	Trenton Water Works.	"	Water	2	2	24	30 12	1 00	"	"	"
706	Trenton Mills.	"	Flour.	2	1	11	26 12	1 15	"	Yes	Yes
707	C. B. Stokes.	"	Ice cream	1	1	4	30 5	1 00	"	No	No
708	Brownell Milling Co.	Plainwell.	Flour.	3	2	10	26 12	1 16	W't'r.	"	"
709	J. O. Patterson.	"	Sash, etc.	3	1	10	26 12	1 50	"	"	"
710	W. M. Stewart.	"	Crates	3	1	10	26 12	1 50	"	"	"
711	Michigan Paper Co.	"	Paper.	54	53	24	26 12	1 26	S&W	No	No
712	J. F. Eesley & Co.	"	Flour.	4	3	10	26 12	1 19	St'm.	"	"
713	City Laundry.	"	Laundry.	4	3	10	26 12	92	"	"	"
714	Michigan Suspender Co.	"	Suspenders.	15	13	10	26 12	96	W't'r.	No	No
715	F. A. Harwood & Co.	"	Fruit, etc.	18	13	10	26 10	90	St'm.	No	No
716	Empire Mills.	Otsego	Flour.	3	1	10	26 12	1 50	W't'r.	....	....
717	Bardeen Paper Co.	"	Paper.	437	338	24	26 12	1 09	W&S	Yes	Yes
718	City Steam Laundry.	"	Laundry.	5	2	10	26 12	1 25	St'm.	No	No
719	Otsego Chair Co.	"	Chairs.	150	125	10	26 12	93	"	"	"
720	Otsego Water Works.	"	Water	2	1	24	30 12	1 33	W't'r.	....	....
721	Reynolds & Trusdale.	"	Lumber.	4	3	10	26 12	2 00	St'm.	No	No
722	G. H. Siple & Co.	"	Grain	3	3	10	26 12	1 30	Gas.	....	....
723	Fairfield & Kolvoord.	Allegan	Flour.	4	3	10	26 12	1 50	W't'r.	"	"
724	Oliver & Co.	"	Furniture.	35	33	10	26 12	1 10	W&S	No	No
725	A. B. Seery.	"	Woodwork.	5	3	9	26 12	2 00	W't'r.	"	"
726	Allegan Wheel Co.	"	Repairs.	8	8	10	26 12	1 25	"	"	"
727	Cook, Baker & Co.	"	Furniture.	50	40	10	26 12	1 29	W&S	No	No
728	Young & Stratton.	"	Flour.	4	2	10	26 12	1 45	W't'r.	....	....
729	Valley Mills.	"	"	2	1	10	26 12	1 00	"	"	"
730	H. M. Olney.	"	Electricity.	10	6	12	30 12	1 40	W&S	No	No
731	Newman Johnson Paper Co.	"	Paper.	30	23	24	26 12	1 63	"	"	"
732	F. A. Sawyer.	"	Lumber.	8	8	10	26 6	1 38	W't'r.	"	"
733	Allegan Steam Laundry.	"	Laundry.	6	4	10	26 12	88	St'm.	No	No
734	Allegan Chronicle.	"	Newsp'r, etc.	8	7	10	26 12	1 15	E & S	"	"
735	Kalamazoo Valley Electric Co.	"	Electricity.	2	2	24	30 12	2 00	W't'r.	....	....
736	E. T. Cruse.	"	Grain	2	1	10	26 12	1 50	Elec.	....	....
737	G. W. Hay.	Woodbury.	Lumber.	4	2	10	26 10	1 25	St'm.	No	No
738	Star Steam Laundry.	Bronson.	Laundry.	2	2	10	26 12	1 00	"	"	"
739	W. S. Farrand.	"	Machinery.	5	1	10	26 12	1 00	Gas.	"	"
740	Powers & Rudd.	"	Grain	4	1	10	26 12	1 25	St'm.	No	No
741	Bronson Roller Mills.	"	Flour.	3	2	10	26 12	1 50	"	"	"
742	Disher & Rooks.	"	Lumber.	53	35	10	26 8	1 19	"	"	"
743	Coward & Monroe Bros.	"	Grain	4	3	10	26 12	1 50	Gas.	"	"
744	F. P. Ellis & Son.	"	Hoops	4	4	10	26 12	1 04	St'm.	No	No
745	Litchfield Butter Co.	Litchfield.	Creamery.	3	3	10	26 12	1 80	"	"	"
746	Litchfield Roller Mills.	"	Flour.	17	17	24	26 12	1 14	"	"	"
747	Litchfield Gazette.	"	Newsp'r, etc.	2	2	10	26 12	75	Gas.	....	....
748	Dresser & Sherk.	"	Screen doors.	5	1	"	"	"	St'm.	No	No
749	T. F. Fowler.	"	Dressed lum.	6	"	"	"	"	"	"	"
750	John Kelly.	"	Sash, etc.	4	"	"	"	"	"	"	"

a Running day and night.

o Running 7 days per week.

u Running over 10 hours per day.

Inspection Book No. 16.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
751	The Courier.....	Coldwater..	Newsp'rs, etc.	6	6	10	26	12	\$1 25 Gas..	....	....
752	Coldwater Steam Laundry.....	"	Laundry	12	12	10	26	12	1 33 St'm. No	....	....
753	Ideal Standard Co.....	"	Standards.....	8	3	10	26	12	1 25 Gas..	....	....
754	National Burial Device Co.....	"	Bur'l devices	20	20	10	26	12	1 45 Rent	....	....
755	Coldwater Steam Dye Works.....	"	Dry goods.....	2	1	10	26	12	1 25 St'm. No	....	....
756	Pratt Manufacturing Co.....	"	Hand sleds.....	65	53	10	26	12	1 26	"	"
757	The All Right Stove Co.....	"	Stoves.....	30	8	10	26	12	2 42	"	"
758	J. B. Hellenberg.....	"	Turning.....	20	20	10	26	12	1 25	"	Yes
759	Shugers Cycle Co.....	"	Repairs.....	5	1	10	26	12	1 50 Gas..	....	....
760	Sanford Loring.....	"	".....	3	1	10	26	12	2 00 St'm. No	....	....
761	Behse Manufacturing Co.....	"	Specialties	15	15	10	26	12	1 23	"	Yes
762	Coldwater Water Works & Elec. Light Co.	"	Electricity	4	4	24	30	12	1 62	"	No
763	J. P. Molby.....	"	Furnaces	9	1	"	"	"	"	"	"
764	W. A. Combs Milling Co., Mill B.	"	Flour.....	17	17	24	26	12	1 47	"	"
765	W. A. Combs Milling Co., Mill A.	"	".....	40	20	24	26	12	1 50	"	"
766	B. H. Kalkins & Son.....	"	Staves.....	70	55	10	26	12	1 06	"	"
767	Johnson Cooperage Co.....	"	".....	114	114	10	26	12	1 17	"	"
768	Coldwater Reporter.....	"	Newsp'rs, etc.	14	14	10	26	12	1 05 Gas..	....	....
769	S. B. Kitchell.....	"	Liniment.....	10	10	10	26	12	.96	"	"
770	N. O. Thompson.....	"	Cigar boxes..	12	12	10	26	12	.84	"	"
771	Ball Bros.....	"	Woodwork	9	9	10	26	12	1 48 St'm. No	....	....
772	C. D. Warner & Co.....	"	Medicines.....	10	7	10	26	12	1 20	"	"
773	The Conover Eng. & Ptg. Co.....	"	Printing.....	18	12	10	26	12	1 09 Gas..	....	....
774	Michigan Portland Cement Co.....	"	Cement.....	200	125	24	30	12	1 60 St'm. No	....	....
775	Knott Bros.' Manufacturing Co.....	"	Plumbing.....	10	10	10	26	4	1 66	"	"
776	Frank Stokes.....	"	Woodwork	10	5	10	26	12	1 66	"	"
777	Thurlow Titus.....	"	Castings.....	5	5	10	26	12	1 83	"	"
778	Tappan Shoe Manufacturing Co.....	"	Shoes.....	200	200	10	26	12	.66	"	Yes
779	O'Shaughnessy Bros.....	"	Cigars.....	13	13	8	26	12	1 39 None	....	....
780	W. A. Combs Milling Co.....	"	Feed.....	5	1	12	26	12	1 75 W'tr	....	....
781	Quincy Roller Mills.....	Quincy.....	Flour.....	7	7	12	26	12	2 14 St'm. No	....	....
782	J. B. Salisbury.....	"	Sash, etc.....	6	6	10	26	10	1 66	"	"
783	Globensky Bros.....	"	Barrels.....	15	15	10	26	12	1 33	"	"
784	Quincy Canning Co.....	"	Canned goods	150	75	10	26	5	.72	"	"
785	Michigan Portland Cement Co.....	"	Cement.....	220	211	24	30	12	1 34	"	"
786	Quincy Elec. Lt. & Power Co.....	"	Electricity	2	2	24	30	12	1 33	"	"
787	Quincy Knitting Co.....	"	Knit goods.....	28	28	9	26	12	.97	"	"
788	American Laundry.....	"	Laundry.....	3	1	10	26	11	1 16 None	....	....
789	J. J. Deal & Son.....	Jonesville..	Carriages.....	75	50	10	26	12	1 66 St'm. Yes	....	....
790	Jonesville Roller Mills.....	"	Flour.....	12	6	11	26	12	1 14 S & W No	....	....
791	Jonesville Water Works.....	"	Water, etc.....	2	2	12	30	12	1 66 St'm. Yes	....	....
792	Jonesville Independent.....	"	Newsp'rs, etc.	3	2	10	26	12	1 33	"	No
793	Electric Oil Stove Co.....	Homer.....	Oil stoves.....	75	25	10	26	9	1 28	"	"
794	Seeder & Hammock Chair Co.....	"	Chairs, etc.....	6	3	10	26	12	1 39	"	"
795	Cortright & Sons.....	"	Flour.....	5	1	10	26	12	1 33 W'tr	....	....
796	Omega Portland Cement Co.....	Jonesville..	Cement.....	100	65	24	30	7	1 79 St'm. No	....	....
797	Hillsdale Iron Works.....	Hillsdale..	Machinery	4	2	10	26	12	1 75	"	"
798	E. C. Campbell.....	"	Sash, etc.....	15	5	10	26	12	1 91 G & S	....	....
799	F. W. Stock & Sons.....	"	Flour.....	60	53	24	26	12	1 56 W & S	....	....
800	Hillsdale Elec. Lt. & Water Co.....	"	Electricity.....	4	4	24	30	12	1 60 St'm.	....	....

* Running day and night.
 o Running 7 days per week.
 u Running over 10 hours per day.

Inspection Book No. 17.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. 1 for idle.		Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
801	Hillsdale Manufacturing Co.....	Hillsdale...	Novelties.....	10	6	10	26 12	\$1 83	St'm.	No			
802	Lewis Globensky.....	"	Cooperage.....	12	10	10	26 12	1 25	"	"			
803	Fay W. Elliott.....	"	Flour.....	5	3	10	26 12	1 25	"	"			
804	Ed. Bentz.....	"	Cider.....	5	1	"	"	"	"	"			
805	Hillsdale Screen Co.....	"	Doors, etc....	80	"	"	"	"	"	"			
806	American Steam Laundry.....	"	Laundry.....	4	4	10	26 9	1 00	W'tr	"			
807	D. E. Ammerman.....	"	Woodwork....	6	3	10	26 12	1 33	Rent.	"			
808	Worthing & Alger Co.....	"	Fur coats....	80	76	10	26 12	1 16	St'm.	No			
809	Hillsdale Furnace & Foundry Co	"	Furnaces.....	10	1	"	"	"	"	"			
810	Freed Bros.....	"	Flour.....	5	1	10	26 12	1 16	"	"			
811	Hillsdale City Gas Co.....	"	Gas.....	2	2	24	30 12	1 66	"	"			
812	G. B. Wolf.....	"	Lumber.....	10	3	10	26 12	1 33	"	"			
813	Star Steam Laundry.....	"	Laundry.....	5	5	10	26 12	56	"	"			
814	Hillsdale Leader.....	"	Newsp'rs, etc.	4	4	10	26 12	1 25	"	"			
815	The Bean-Chamberlin Mfg. Co....	Hudson....	Pumps.....	150	100	10	26 12	1 66	"	"			
816	Nat Lane.....	"	Machinery....	2	2	10	26 12	1 66	"	"			
817	Abbott Voting Machine Co.....	"	Machines....	18	18	10	26 12	1 67	"	"			
818	Hudson Milling Co.....	"	Flour.....	2	2	12	26 12	1 66	"	"			
819	Elliott & Co.....	"	".....	3	1	12	26 12	1 16	"	"			
820	Meyers & Deville.....	"	Furniture....	8	8	10	26 12	1 50	"	Yes			
821	Star Laundry.....	"	Laundry.....	6	6	10	26 12	83	"	No			
822	Pearl Steam Laundry.....	"	".....	7	7	10	26 12	1 16	"	"			
823	Hudson Water Works.....	"	Water.....	2	2	24	30 12	1 66	"	Yes			
824	Hudson Electric Light Co.....	"	Electricity....	2	2	12	30 12	1 50	"	No			
825	South Haven Preserving Co.....	So. Haven..	Canned fruit.	200	135	10	26 5	78	"	"			
826	South Haven Flouring Mill.....	"	Flour.....	5	3	10	26 12	1 66	"	"			
827	Ketzeback & Reed.....	"	Boxes.....	8	8	10	26 6	1 50	"	Yes			
828	Myham Leather Co.....	"	Leather.....	100	25	10	26 12	1 46	"	"			
829	J. C. Randall.....	"	Lumber.....	6	6	10	26 12	1 66	"	No			
830	Dunkley Celery & Preserving Co	"	Canned goods	200	100	10	26 4	83	"	"			
831	Winkle Bros.....	"	Lumber.....	4	3	10	26 10	1 94	"	"			
832	South Haven Steam Laundry.....	"	Laundry.....	9	9	10	26 12	1 26	Elec.	"			
833	City Steam Laundry.....	"	".....	8	8	10	26 12	1 00	St'm.	Yes			
834	South Haven Water & Light Co.	"	Electricity....	4	4	24	30 12	1 60	"	"			
835	Michigan Anchor Fence Co.....	"	Fence.....	4	3	10	26 12	1 50	None	"			
836	Vinegar & Pickle Co.....	"	Pickles.....	2	2	10	26 3	2 00	Elec.	"			
837	Wm. Mackey & Sons.....	"	Stoves.....	20	12	10	26 12	2 43	St'm.	No			
838	Pierce-Williams Co.....	"	Baskets.....	150	142	10	26 8	1 06	None	"			
839	H. Ovenshire.....	Bellevue...	Flour.....	3	3	10	26 12	1 55	St'm.	No			
840	J. W. French & Sons.....	"	Lumber.....	20	5	10	26 10	1 33	W'tr	"			
841	Michigan Alkali Co.....	"	Stone.....	300	70	10	26 12	1 09	St'm.	No			
842	P. Shields.....	Williams...	Brick.....	12	7	10	26 7	1 25	Elec.	"			
843	Williams Hoop & Heading Co....	"	Hoops.....	60	50	10	26 9	1 00	St'm.	No			
844	E. C. Howard.....	Goblesville.	Dried fruit....	15	8	10	26 3	75	W'tr	"			
845	J. G. Clark & Co.....	"	Flour.....	2	2	10	26 12	1 41	St'm.	No			
846	J. L. Clements & Son.....	"	Lumber.....	8	1	"	"	"	"	"			
847	Goblesville Creamery Co.....	"	Butter.....	2	2	10	26 12	1 54	"	"			
848	Goblesville Canning Co.....	"	Canned goods	80	71	12	26 5	90	"	"			
849	Bloomington Milling Co.....	Bloomington..	Flour.....	2	2	10	26 12	1 20	"	Yes			
850	E. J. Merrifield.....	"	Lumber.....	12	1	"	"	"	"	No			

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 18.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. If for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
851	Lawton Electric Light Works....	Lawton....	Electricity....	1	1	10	30	12	\$1 50	St'm.	No
852	E. Beam & Son.....	"	Flour	3	3	10	26	12	1 33	"	"
853	Reynolds & McRice.....	"	Baskets	37	28	10	26	12	1 00	"	"
854	D. W. Powell.....	"	Cider, etc.	10	2	10	26	3	1 12	"	"
855	Model Steam Laundry.....	Paw Paw....	Laundry.....	4	4	10	26	12	.88	"	"
856	Paw Paw Milling Co.....	"	Flour	3	2	10	26	12	1 25	"	"
857	P. P. Steam Power Evap. Works.	"	Dried fruit....	41	41	10	26	3	.98	"	"
858	Paw Paw Canning Co.....	"	Canned goods	150	80	10	26	6	.94	"	"
859	W. J. Porter & Sons.....	"	Baskets	25	14	10	26	8	1 07	"	"
860	Paw Paw Water Works.....	"	Water	1	1	24	30	12	1 33	"	"
861	Hartford Stave Co.....	Hartford....	Staves.....	10	10	10	26	12	1 20	"	"
862	Merriman & Leach.....	"	Lumber	20	1	"	"	"	"	"	"
863	Hartford City Mills.....	"	Flour	2	2	10	26	12	1 40	"	"
864	Hartford Cheese Co.....	"	Cheese.....	2	1	10	30	12	1 67	"	"
865	E. J. Walker & Son.....	"	Hoops.....	8	7	10	26	8	1 46	"	"
866	The Syms & Dudley Paper Co....	Watervliet.	Paper.....	75	67	24	26	12	1 03	Gas....	"
867	W. M. Broadwell.....	Bangor.....	Lumber	5	3	10	26	9	1 25	"	"
868	Squier-Dingee Co.....	"	Pickles.....	8	3	10	26	5	1 50	St'm.	No
869	Bangor Box & Basket Co.....	"	Baskets	35	17	10	26	7	.96	"	"
870	Mullen Bros. Paper Co.....	St. Joseph.	Paper.....	50	45	24	26	12	1 20	"	"
871	Western Book & Paper Co.....	"	Printing.....	35	28	10	26	9	1 90	None....	"
872	Frank Morlock.....	"	Cider.....	4	4	10	26	3	1 25	Gas....	"
873	Cooper, Wells & Co.....	"	Knit goods....	300	277	10	26	12	1 12	St'm.	No
874	St. Joseph Iron Works.....	"	Machinery....	50	35	10	26	12	1 67	"	Yes
875	St. J. & B. H. St. Ry. & Lt. Co..	"	Electricity....	9	9	24	30	12	1 62	"	No
876	Ireland Bros.....	"	Lumber	6	2	10	26	12	1 50	"	"
877	Twin City Milling Co.....	"	Flour	7	7	12	26	12	1 78	"	"
878	St. Joseph Water Works.....	"	Water	2	2	24	30	12	1 91	"	Yes
879	Barnes & Brown Co.....	"	Carriages.....	20	10	10	26	12	1 75	"	No
880	Truscott Boat Mfg. Co.....	"	Boats	250	80	10	26	12	1 67	"	"
881	The Compound Door Co.....	"	Doors	68	68	10	26	12	1 60	"	"
882	Wells-Higman Co.....	"	Baskets	25	10	10	26	6	.72	"	"
883	W. A. Preston.....	"	Sash, etc.	18	18	10	26	12	1 83	"	"
884	The Model Steam Laundry.....	"	Laundry	10	5	10	26	12	1 16	"	Yes
885	George W. Schneider.....	"	Cigars	15	8	8	26	12	1 88	Gas....	"
886	Evening Press.....	"	Newsp'rs, etc.	8	8	10	26	12	1 08	None....	"
887	Marshall Furnace Co.....	Marshall....	Furnaces.....	50	46	10	26	12	2 00	St'm.	No
888	J. L. Dobbins Furnace Co.....	"	"	12	12	10	26	12	1 75	"	"
889	Marshall City Mills.....	"	Flour	3	1	10	26	12	1 00	W't'r	"
890	Rice Creek Mills.....	"	"	5	3	15	26	12	1 38	St'm.	No
891	City Laundry.....	"	Laundry	8	7	10	26	12	.83	"	"
892	Marshall Statesman.....	"	Newsp'rs, etc.	14	14	10	26	12	1 30	Horse....	"
893	Eagle Brewing Co.....	"	Beer	3	3	10	26	12	1 50	St'm.	Yes
894	Marshall City Electric Works....	"	Electricity....	2	2	10	30	12	1 83	"	No
895	Marshall City Water Works.....	"	Water	2	2	12	30	12	1 83	"	"
896	J. Court & Son.....	"	Butter, etc....	25	16	10	26	12	1 56	"	"
897	Marshall Casket Co.....	"	Caskets.....	75	35	10	26	12	1 90	"	"
898	Marshall Gas Co.....	"	Gas	1	1	10	26	12	2 25	"	"
899	Marshall Roller Mills.....	"	Flour	20	1	"	"	"	"	"	"
900	A. Egeler & Co.....	"	Flows.....	5	2	10	26	12	1 37	"	"

* Running day and night.

* Running 7 days per week.

* Running over 10 hours per day.

Inspection Book No. 19.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
901	Page Bros. Buggy Co.	Marshall...	Carriages...	70	30	10	26	12	\$1 33	St'm.	No
902	Folding Bath Tub Co.	"	Bath Tubs...	30	25	10	26	12	1 66	"	Yes
903	C. N. R'y shops.	"	Repairs...	45	35	8	26	12	1 50	"	No
904	Wagon & Windmill Co.	"	Wagons, etc.	12	8	10	26	12	1 45	Gas.	"
905	Climax Roller Flour Co.	Climax...	Flour...	3	2	10	26	9	1 37	St'm.	No
906	H. Pierce	"	Lumber	10	4	10	26	6	1 50	"	"
907	Eureka Hoop Co.	Scotts	Hoops...	30	25	10	26	12	1 72	"	"
908	Chas. R. White	"	Flour	3	3	10	26	12	1 38	S & W	"
909	Three Rivers Tannery.	Three Riv's	Robes	23	10	10	26	12	1 41	Elec.	"
910	Harris Milling Co.	"	Flour	12	9	10	26	12	1 86	Wat'r	"
911	Three Rivers Water Works.	"	Water	2	2	24	30	12	1 83	S & W	No
912	The Roberts Car & Wheel Co.	"	Cars, etc.	90	90	10	26	12	1 00	"	"
913	Sheffield Car Co.	"	"	250	225	10	26	12	1 63	"	"
914	Three Rivers Electric Co.	"	Motors, etc.	30	21	10	26	12	1 66	Elec.	"
915	Three Rivers Paper Co.	"	Paper	75	62	24	26	12	1 27	St'm.	No
916	Palace Laundry	"	Laundry	3	2	10	26	9	1 37	None	"
917	Carl Klocke	"	Cigars	15	11	8	26	12	1 81	"	"
918	Armstrong Machine Works.	"	Spokes, etc.	25	15	10	26	7	1 50	Gas.	"
919	American Laundry	"	Laundry	2	2	10	26	12	1 25	None	"
920	City Laundry	"	"	2	2	10	26	12	1 25	"	"
921	Buchanan Water Works	Buchanan	Water	2	2	24	30	12	1 33	St'm.	No
922	Zinc Collar Pad Co.	"	Collar Pads	5	4	10	26	12	1 45	S & E	"
923	M. S. Mead	"	Lumber	8	4	10	26	6	1 25	St'm.	"
924	Buchanan Cabinet Co.	"	Furniture	51	51	10	26	12	1 16	"	"
925	Niagara Mills	"	Flour	6	5	10	26	12	1 83	S & W	"
926	Lee & Porter	"	Axles	80	60	10	26	12	1 85	Wat'r	"
927	Blodgett & Blodgett	"	Brick and tile	6	6	10	26	12	1 33	St'm.	No
928	Geo. H. Black	"	Specialties	4	2	10	26	12	1 50	S & E	"
929	Electric Laundry	"	Laundry	2	2	10	26	12	1 25	None	"
930	The Warren Featherbone Co.	Three Oaks	Featherbone	325	312	10	26	12	80	St'm.	Yes
931	Electric Light & Water Co.	"	Water & Elec	2	2	212	30	12	1 46	"	No
932	Michigan Central Knitting Co.	Centerville	Knit goods	75	75	10	26	3	77	S & W	"
933	Lyman Blakely	Mendon	Cider	5	3	10	26	2	1 66	St'm.	"
934	Mendon Roller Mills	"	Flour	4	2	10	26	12	1 50	"	"
935	Morgan Glove Co.	"	Gloves	15	10	10	26	6	83	Gas.	"
936	Electric Light Co.	"	Electric light	2	2	212	30	12	1 06	St'm.	No
937	C. E. Beebe & Co.	"	Grain	15	10	10	26	12	1 33	"	"
938	D. F. Morgan	"	Gloves	5	3	10	26	3	1 33	Gas.	"
939	Beckley & Austin	"	Lumber	8	6	10	26	12	1 41	St'm.	No
940	Grand Ledge Chair Co.	Grand Ledge	Chairs	100	100	10	26	12	1 36	Wat'r	"
941	Electric Light & Water Co.	"	Electric'y, etc	3	3	24	30	12	1 50	St'm.	No
942	White Lead Color Works	"	White Lead	6	3	10	26	12	1 50	"	"
943	City Iron Works	"	Machinery	4	3	10	26	12	1 50	Wat'r	"
944	Hixson & Hixson	"	Flour	2	2	10	26	12	1 25	"	"
945	Monitor Mills	"	"	2	2	10	26	12	1 42	St'm.	No
946	Doty & Davies	"	Grain	17	15	10	26	12	76	"	Yes
947	Sewer Pipe Co.	"	Sewer Pipe	50	50	10	26	12	1 33	"	"
948	Grand Ledge Edge Tool Works	"	Tools	4	2	10	26	12	1 50	Gas.	"
949	Eureka Dehorning Clipper Co.	South Lyons	Clippers	3	2	10	26	12	1 50	"	"
950	South Lyons Electric Light Co.	"	Electricity	2	1	8	30	8	1 33	St'm.	No

* Running night and day.
 • Running 7 days per week.
 • Running over 10 hours per day.

Inspection Book No. 20.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
951	Pontiac Gas & Electric Works...	Pontiac.....	Gas and elec.	3	3	24	30	12	\$1 55	St'm.	Yes
952	Pontiac Phaeton Co.....	"	Carriages.	35	15	10	26	12	1 38	Gas/ine	Yes
953	P. O. & N. Railway Shops.....	"	Repairs.	17	17	10	26	12	1 76	None	No
954	Pontiac Steam Laundry.....	"	Laundry.	18	15	10	26	12	96	St'm.	No
955	Pontiac Wheel Co.....	"	Wheels	75	60	10	26	12	1 33	"	Yes
956	Mackey Engine Works.....	"	Gas/ine eng's	6	4	10	26	12	2 08	Gas/ine	Yes
957	Wright & Hooper.....	"	Carriage seats	3	2	10	26	6	2 00	St'm.	No
958	Barnes Paper Co.....	Rochester..	Paper.	10	10	24	26	12	1 40	S.&W	"
959	D. R. R. & L. O. Railway.....	"	Electricity...	5	5	18	30	12	1 93	St'm.	Yes
960	Western Knitting Mills.....	"	Knit goods...	300	277	10	26	12	54	"	No
961	Rochester Handle Co.....	"	Handles.....	5	3	10	26	12	1 50	"	"
962	Detroit Sugar Co.....	"	Sugar.....	250	165	24	30	3	1 80	"	Yes
963	The Monroe Cart Co.....	"	Carts, etc...	15	5	10	26	12	1 35	"	No
964	Albert Kennedy.....	Romeo.....	Sash & doors.	8	4	10	26	12	1 45	"	"
965	Romeo Electric Light Works...	"	Electricity...	2	2	10	30	12	1 38	"	"
966	Buckley Stave Co.....	"	Staves, etc...	60	50	10	26	7	1 08	"	Yes
967	Romeo Roller Mills.....	"	Flour.....	2	2	10	26	12	1 50	"	No
968	Romeo Water Works.....	"	Water.....	1	1	24	30	12	1 66	"	"
969	Burkhart Steam Laundry.....	Mt. Clemens	Laundry.....	35	18	12	26	12	64	"	"
970	Mt. Clemens Electric Co.....	"	Electricity...	4	4	24	30	12	1 54	"	"
971	Phillips & McCreedy.....	"	Machinery...	7	5	10	26	12	95	"	"
972	Sprudel Water Co.....	"	Sprudel water	25	11	10	26	12	98	"	"
973	Hubarth & Schott.....	"	Sash & doors.	10	10	10	26	12	1 75	Rent	....
974	Mt. Clemens Lumber Co.....	"	Lumber.....	3	3	9	26	3	1 58	St'm.	Yes
975	Lewis & Olney.....	"	Sash & doors.	8	4	10	26	12	1 45	"	"
976	City Water Works.....	"	Water.....	4	4	24	30	12	1 45	"	"
977	Farmers' Elevator Co.....	Lenox.....	Grain.....	8	4	10	26	12	1 21	Gas/ine	....
978	Lenox Roller Mills.....	"	Flour.....	4	3	12	26	12	1 33	St'm.	No
979	Lenox Machine Shop.....	"	Repairs.....	3	3	10	26	12	1 00	Gas/ine	....
980	J. L. Hoeling.....	"	Hay bales...	5	5	10	26	3	1 00	"	....
981	Lenox Hoop Co.....	"	Hoops.....	7	7	10	26	12	1 14	St'm.	No
982	G. W. Weston.....	Richmond..	Sash, etc...	4	4	10	26	12	1 50	"	"
983	Richmond Elec. Lt. & Water Co.	"	Elec. & water	2	2	15	30	12	1 36	"	Yes
984	Richmond Agricultural Works...	"	Implements...	7	7	10	26	12	1 22	Gas/ine	....
985	Model Steam Laundry.....	"	Laundry.....	2	2	10	26	12	1 00	St'm.	No
986	Richmond Woolen Mills.....	"	Yarn.....	5	5	10	26	12	1 15	"	"
987	Weter, Fanning & Co.....	"	Butter & eggs	11	11	10	26	9	94	None	....
988	George Butzback.....	Benton Harbor.	Barrels.....	8	5	10	26	3	2 50	"	....
989	City Steam Laundry.....	"	Laundry.....	35	25	10	26	12	1 13	St'm.	Yes
990	Benton Harbor Water Works...	"	Water.....	2	2	12	30	12	1 66	"	"
991	B. H. and St. Joseph Gas Co.....	"	Gas.....	2	2	16	30	12	1 75	"	"
992	Hooper-Morgan Co.....	"	Blank books.	75	30	10	26	12	1 33	"	No
993	J. V. Farwell Co.....	"	Garments...	125	125	10	26	9	1 03	"	"
994	Columbia Manufacturing Co.....	"	Radiators...	30	30	10	26	2	1 38	"	"
995	The Spencer-Barnes Co.....	"	Furniture...	150	120	10	26	12	1 38	"	"
996	Seely McCord.....	"	Brick and tile	20	11	10	26	8	1 35	"	Yes
997	Squire-Dingee Co.....	"	Cider, etc...	20	20	10	26	12	1 50	"	No
998	Wolverine Sugar Co.....	"	Sugar.....	125	125	24	30	2	1 80	"	Yes
999	A. Baushke & Bros.....	"	Wagons.....	12	7	10	26	12	1 75	"	"
1000	Lansing Gas Light Co.....	Lansing....	Gas.....	7	7	24	30	12	1 45	"	No

* Running day and night.

° Running 7 days per week.

v Running over 10 hours per day.

Inspection Book No. 21.

Inspection District No. 2.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1001	Colby-Hinckley Co.	Benton Harbor.	Fruit pack'gs.	150	75	10	26 11		\$1 33	St'm.	No
1002	Berkhiser & Moore.....	" "	Specialties....	17	10	10	26 8		2 08	"	"
1003	C. H. Godfrey	" "	Canned fruit.	175	4	10	26 5		1 20	"	"
1004	Peters Lumber & Shingle Co....	" "	Lumber.....	125	118	10	26 12		1 42	"	"
1005	Robinson Cider & Vinegar Co....	" "	Cider, etc....	12	12	10	26 4		1 25	"	"
1006	Daily Palladium.....	" "	Newspapers, etc..	9	9	10	26 12		1 38	Elec.	....
1007	Benton Harbor Products Co.....	" "	Vinegar.....	10	10	10	26 3		1 50	St'm.	No
1008	Enterprise Steam Laundry.....	" "	Laundry.....	6	6	10	36 12		97	"	"
1009	Columbian Cigar Co.....	" "	Cigars.....	20	20	9	26 12		1 75	None	"
1010	Geo. B. Thayer & Co.....	" "	Fruit pack'gs.	125	70	10	26 12		1 35	St'm.	Yes
1011	Michigan Granite Co.....	Adrian.....	Monuments....	14	11	8	26 12		3 00	Rent.	....
1012	O. Knight & Son.....	" "	Feed.....	2	2	10	26 12		1 50	St'm.	No
1013	S. P. Babcock, Son & Co.....	" "	Corn planters	3	3	10	26 12		83	Gas'ine	"
1014	Electric Light & Power Co.....	" "	Electricity....	10	10	24	330 12		1 66	St'm.	No
1015	Plating Works.....	" "	Plating.....	4	4	9	26 12		1 45	"	"
1016	Troy Laundry.....	" "	Laundry.....	7	7	10	26 12		83	Rent.	....
1017	Pure Food Preserving Co.....	" "	Catsup.....	5	5	10	26 12		1 50	St'm.	No
1018	Washington Milling Co.....	" "	Flour.....	7	7	12	26 12		2 38	"	"
1019	Adrian Brick & Tile Mach. Co....	" "	Brick mach's.	21	21	10	26 12		1 58	"	"
1020	Adrian Packing Co.....	" "	Canned fruit.	150	150	10	26 2		90	"	"
1021	Withington & Co.....	" "	Wire fence....	5	3	10	26 12		1 33	"	"
1022	Adrian Water Co.....	" "	Water.....	5	5	24	330 12		91	"	"
1023	Page Woven Wire Fence Co.....	" "	Fence.....	250	227	15	26 12		2 12	"	Yes
1024	Lesh & Young Co.....	" "	Lumber.....	50	50	10	26 12		1 50	"	No
1025	The Lamb Wire Fence Co.....	" "	Fence.....	50	32	10	26 12		1 71	"	Yes
1026	American Screen Door Co.....	" "	Screens.....	45	20	10	26 10		1 15	"	No
1027	A. E. Palmer Furniture Co.....	" "	Furniture.....	25	25	9	26 12		1 66	"	"
1028	Bond Steel Post Co.....	" "	Mail boxes, etc	45	43	10	26 12		1 66	"	"
1029	Church Mfg. Co.....	" "	Gasoline engines.	25	16	10	26 12		2 10	Gas'ine	....
1030	Gilliland Electric Co.....	" "	Electric special's	70	35	9	26 12		1 76	St'm.	Yes
1031	City Roller Mill.....	" "	Flour.....	2	1						
1032	Clough & Warren Co.....	" "	Pianos.....	110	110	10	26 12		1 81	St'm.	No
1033	The Times.....	" "	Newspapers, etc.	20	20	10	26 12		1 45	S & G	Yes
1034	Excelsior Steam Laundry.....	" "	Laundry.....	5	5	9	26 12		1 00	St'm.	No
1035	Kells Foundry & Machine Shop.	" "	Iron work.....	25	20	10	26 12		1 66	"	"
1036	Union Brewery.....	" "	Beer.....	6	6	10	26 12		1 37	"	"
1037	Kimball & Co.....	" "	Cigar boxes....	10	4	10	26 2		1 08	Gas'ine	....
1038	Adrian City Brewery.....	" "	Beer.....	5	5	10	26 12		1 73	St'm.	No
1039	Goodsell Mfg. Co.....	" "	Lumber.....	25	18	10	26 12		1 25	"	"
1040	Riverside Canning Co.....	" "	Canned goods	100	1						
1041	Temple, McClure & Co.....	Tecumseh...	Sash & doors.	25	25	10	26 12		1 40	St'm.	No
1042	Tecumseh Electric Co.....	" "	Electricity....	3	3	12	330 12		1 55	"	"
1043	G. U. Smith.....	" "	Paper.....	20	20	24	26 6		1 25	"	Yes
1044	H. Brewer & Co.....	" "	Machinery.....	50	32	10	26 12		1 50	"	"
1045	C. H. Heck & Co.....	" "	Flour.....	2	2	8	26 12		1 25	"	No
1046	Tecumseh Steam Laundry.....	" "	Laundry.....	4	4	10	26 12		1 00	"	"
1047	M. A. Zimmerman.....	" "	Handles.....	8	8	10	26 12		1 45	"	"
1048	D. & L. N. K'y.....	" "	Machinery.....	81	81	10	26 12		2 13	"	"
1049	Heesen Bros. & Co.....	" "	Iron work.....	35	25	10	26 12		1 66	"	"
1050	J. R. Hailey.....	" "	Carriages.....	20	5	9	26 12		1 66	None	....

* Running day and night.

° Running 7 days per week.

u Running over 10 hours per day.

Inspection Book No. 22.

Inspection District No. 2.—Concluded.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employes when running full capacity.	Number of employes at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1051	L. J. Smith	Eaton R'pds	Egg cases	30	30	10	26 12		\$0 87	W'tr	No
1052	Eaton Rapids City Water Works	"	Water	2	2	a 24	o 30 12		1 08	St'm.	No
1053	Island City Mills	"	Flour & elec.	3	3	a 24	o 30 12		1 50	S & W	"
1054	Eaton Rapids Woolen Mills	"	Yarn	40	40	10	26 12		1 12	"	Yes
1055	Bissell Plow Co.	"	Plows	20	12	10	26 12		1 50	W'tr	....
1056	David Woodward & Son	Clinton	"	8	6	10	26 8		1 58	St'm.	No
1057	Clinton Granite Works	"	Marble	8	5	9	26 12		1 50	"	"
1058	Monroe Butter & Cheese Factory	Monroe	Butter	3	3	10	26 12		1 63	"	"
1059	Monroe Canning & Packing Co.	"	Canned goods	115	70	10	26 3		1 66	"	"
1060	C. F. Beck & Son	"	Dressed lum.	5	4	10	26 12		1 75	"	"
1061	J. K. Wilder & Son	"	Farm imp'ts	30	27	10	26 12		1 39	"	"
1062	Boehme & Rauche Cordage Co.	"	Paper	22	22	a 24	26 12		1 32	"	"
1063	River Raisin Paper Co.	"	"	30	30	a 24	29 8		1 33	"	"
1064	A. H. Waters & Co.	"	Dressed lum.	10	6	10	26 12		1 75	"	"
1065	The Denizer Furniture Co.	"	Furniture	48	48	10	26 12		1 21	"	"
1066	Monroe City Mills	"	Flour	6	6	u 18	26 12		1 44	"	"
1067	Monroe Steam Laundry	"	Laundry	6	6	10	26 12		97	"	"
1068	Monroe Gas Co.	"	Gas	3	3	10	26 12		1 66	None	....
1069	Monroe Paper Co.	"	Paper	24	18	a 24	26 12		1 00	St'm.	No
1070	Wahl Brewing Co.	"	Beer	12	12	10	26 12		1 60	"	"
1071	The Monroe Foundry & Furn. Co.	"	Furnaces	60	57	10	26 12		1 52	"	"
1072	Boehme & Rauche Cordage Co.	"	Cordage, etc.	15	15	10	26 12		66	Gas line	....
1073	The Weier Wine Co.	"	Wine	4	4	10	26 12		1 50	None	....
1074	Monroe Democrat	"	Newsp'rs, etc.	7	7	10	26 12		1 76	Gas line	....
1075	Monroe Commercial	"	"	5	5	10	26 12		83	Gas	....
1076	Monroe Elec. Light & Power Co.	"	Electricity	4	4	u 12	o 30 12		1 78	St'm.	No

a Running day and night.

u Running 7 days per week.

u Running over 10 hours per day.

DEDUCTIONS FROM WORK IN SECOND DISTRICT.

During the year there were 1,076 factories inspected, as against 825 in 1899. Of these, 1,037, or over 96 per cent, were running at the time of inspection, only 39 being found idle. Those running were averaging 11.3 hours per day, a decided increase over that of 1899. This is accounted for as many factories were working day and night, necessitating two sets of hands. They were averaging 26.4 days per month, and 11.3 months per year.

If running full capacity they would employ 43,151 persons, an average of 40.1 for each factory. At the time of inspection they were employing 27,801 males and 6,459 females, a total of 34,343 employes, which is an average of 33.1 for each factory inspected, or an average less full

capacity of seven each. The females were employed in 344 factories, an average of 6.2 for each factory employing females. There is a slight decrease in the percentage of employes for each factory as compared with 1899.

It was found that 52 factories employed children between the ages of 14 and 16 years, and that the children so employed numbered 249, an average of 4.8 for each factory employing children. This shows an increase of this class of child labor over 1899. Very few children were found employed who were under 14 years old, the order for the dismissal of such being immediately made.

The average daily pay rolls of the factories that were running aggregated \$48,011.84, an average for each factory of \$46.29, or an average for each employe of about \$1.40. This is an increase of about 10 cents per day for each employe, both male and female, as compared with 1899.

These factories have been in operation an average of 12.3 years each, one dating back to 1820. The reports also show that 356, or 35 per cent of them, have been established since 1895, the largest number, 82, being in the present year. This would indicate a healthy condition of the manufacturing interests in this district.

In the matter of business, 768, or 74 per cent, of the 1,037 factories inspected report an increasing business during the past year; 248, or 23 per cent, report more capital invested, and 362, or about 34 per cent, say they are giving employment to more laborers. From a business standpoint the outlook is encouraging.

Regarding the kind of motive power used in these factories, 698, or 65 per cent use steam power, 78 use electric, 83 use gasoline, 55 use water power, 37 rent their power, 6 use hand power, one uses horse power, and 79 are factories where power is not needed. It will be seen that steam is yet the principal power used for manufacturing purposes.

Of the 698 factories using steam power, the boilers of only 156, or less than 15 per cent, were supplied with low water alarms, and that even ten of these were not in good working condition. The alarms used represented 15 different devices, the "Reliance" being the one most generally in use.

The inspectors found it necessary to make orders for changes in 623 factories, but of these 552 were connected with the low water alarms for boilers, either new ones or to repair the ones in use. It is gratifying to know that the other sections of the law are being complied with, and that before another visit of the inspector nearly all steam boilers will be supplied with good, practical low water alarms.

There were only 17 accidents reported during the year, two less than in 1899. These occurred in 14 different factories. Of these only one was fatal, seven serious, five severe, and four slight. See table of accidents and deductions therefrom on pages following:

CHANGES ORDERED DURING YEAR.

DISTRICT NO. 2.

[The number refers to the inspection number in table.]

- 1.—Names of people registered who take work out.
- 6.—Separate water closets for females.
- 9.—Exhaust fans for emery wheels.
- 11.—All setscrews guarded and trap door for elevator.
- 14.—Sprocket gear on enameling machine guarded.
- 27.—Exhaust fans for emery wheels.
- 33.—Automatic trap for elevator.
- 34.—A wash and dressing room.
- 37.—Main belt in engine room and all set screws guarded.
- 87.—Setscrews on lineshaft guarded.
- 88.—High water alarms cut out.
- 104.—Side of flywheel and two belts in engine room guarded.
- 108.—Setscrews on line shaft guarded.
- 119.—All setscrews on shafting guarded.
- 122.—Main belt in bread room boxed.
- 123.—Guard on side of flywheel in engine room and setscrews on shafting guarded.
- 143.—Elevator repaired and provided with automatic gates.
- 156.—Main belt in machine room boxed.
- 188.—Fire escape on west side of factory.
- 201.—Stairs from roof to storehouse, flywheel and pulley guarded.
- 203.—Automatic gates for elevator.
- 216.—Gates for elevator.
- 218.—Gates for elevator.
- 220.—Elevator gates repaired.
- 251.—Closet cleaned.
- 255.—Belts in basement guarded.
- 295.—Automatic gates for elevator.
- 390.—Sworn statements for all children employed.
- 393.—Sworn statement for one child employed.
- 412.—Automatic gates for elevator.
- 428.—Sworn statements for all children employed.
- 435.—Sworn statements for all children employed.
- 439.—Sworn statements for all children employed.
- 440.—Sworn statements for two children employed.
- 441.—Sworn statements for all children employed.
- 442.—Sworn statements for all children employed.
- 456.—Sworn statements for two boys employed.
- 458.—Automatic gates for elevator.
- 466.—Belt on engine guarded.
- 486.—Sworn statements for all children employed.
- 487.—Sworn statement for one boy employed.
- 492.—Sworn statements for all children employed.
- 502.—Sworn statements for all children employed.
- 503.—Sworn statements for all children employed.
- 506.—Two boys under 14 discharged.
- 577.—Guards and blowers on emery wheel.
- 584.—Shifter for small rip saw and emery wheel guarded.
- 601.—Sworn statements for two children employed.

- 607.—Sworn statements for all children employed.
- 608.—Sworn statements for all children employed.
- 610.—Sworn statements for all children employed.
- 618.—Automatic gates for elevator in paint shop.
- 650.—Sworn statements for all children employed.
- 651.—Cogs on planer guarded.
- 667.—Belt on small planer guarded.
- 704.—Sworn statements for all children employed.
- 711.—Cog gears on paper machine.
- 726.—Guards and shifters for emery wheels.
- 786.—Pumps guarded.
- 795.—Stairs to basement guarded.
- 840.—Shifter on rip saw.
- 969.—Gate on shaft.
- 993.—Gates on elevator.
- 994.—Guards on milling machine.
- 1032.—Sworn statements for children.

The numbers below are the factories in which low water alarms were ordered. A reference to the number given in the table will designate the name of these factories:

4, 7, 8, 18, 21, 22, 23, 27, 30, 32, 35, 36, 37, 39, 40, 41, 43, 45, 46, 47, 48, 49, 51, 54, 55, 56, 58, 59, 69, 74, 79, 80, 81, 84, 85, 87, 88, 89, 90, 91, 99, 103, 116, 117, 118, 121, 123, 128, 129, 131, 132, 133, 135, 137, 139, 142, 147, 148, 149, 151, 152, 154, 155, 156, 158, 159, 162, 164, 165, 166, 167, 169, 173, 177, 184, 186, 187, 198, 199, 200, 202, 207, 211, 212, 213, 217, 222, 225, 227, 228, 230, 232, 233, 236, 239, 240, 242, 243, 246, 248, 249, 251, 252, 253, 255, 257, 264, 267, 269, 270, 276, 279, 288, 290, 291, 296, 297, 298, 300, 302, 303, 305, 307, 311, 313, 314, 315, 316, 317, 318, 319, 320, 321, 324, 326, 327, 328, 334, 335, 336, 337, 338, 339, 343, 344, 345, 348, 349, 350, 351, 352, 354, 356, 359, 365, 366, 367, 368, 370, 372, 373, 375, 377, 378, 383, 385, 386, 387, 388, 389, 398, 403, 411, 415, 421, 422, 423, 426, 428, 431, 433, 434, 437, 438, 439, 441, 443, 445, 446, 450, 458, 459, 461, 462, 463, 464, 466, 468, 469, 470, 471, 472, 473, 474, 475, 481, 483, 485, 488, 490, 491, 492, 493, 495, 497, 499, 502, 504, 505, 506, 507, 508, 509, 512, 513, 514, 515, 516, 518, 519, 520, 521, 522, 524, 526, 527, 528, 529, 532, 533, 534, 535, 536, 538, 540, 542, 544, 546, 548, 550, 553, 554, 556, 559, 561, 562, 563, 564, 566, 567, 569, 570, 571, 572, 573, 574, 575, 576, 578, 579, 581, 582, 583, 586, 587, 589, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 604, 606, 611, 614, 619, 621, 622, 623, 626, 627, 628, 630, 637, 638, 640, 641, 642, 643, 644, 645, 646, 647, 649, 651, 655, 657, 660, 661, 662, 663, 664, 665, 667, 669, 670, 675, 676, 678, 680, 681, 682, 683, 684, 685, 686, 687, 688, 690, 691, 693, 694, 695, 696, 697, 703, 704, 705, 707, 711, 712, 713, 715, 717, 718, 719, 721, 724, 727, 730, 731, 733, 734, 737, 738, 740, 741, 742, 744, 745, 746, 749, 752, 755, 756, 757, 760, 762, 763, 764, 765, 766, 767, 771, 772, 774, 775, 776, 777, 781, 782, 783, 784, 785, 786, 787, 790, 792, 793, 794, 796, 797, 798, 799, 800, 801, 802, 803, 804, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 818, 819, 820, 823, 824, 825, 826, 827, 829, 830, 831, 832, 833, 834, 837, 838, 840, 841, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 871, 872, 874, 875, 876, 879, 880, 881, 884, 887, 889, 891, 893, 895, 896, 897, 898, 900, 901, 903, 905, 906, 907, 908, 911, 913, 915, 921, 922, 923, 924, 925, 927, 928, 930, 931, 932, 933, 934, 936, 937, 939, 940, 941, 942, 945, 950, 954, 957, 958, 960, 961, 963, 964, 965, 968, 969, 970, 971, 972, 975, 976, 978, 981, 982, 985, 986, 992, 993, 994, 995, 997, 1000, 1001, 1002, 1005, 1007, 1008, 1012, 1014, 1015, 1017, 1018, 1019, 1020, 1021, 1022, 1024, 1026, 1027, 1028, 1032, 1034, 1035, 1036, 1039, 1040, 1042, 1045, 1046, 1048, 1049, 1052, 1053, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1069, 1070, 1071, 1076.

Inspection District No. 2.

Accidents reported in

No. of factory for 1900.	Name of establishment.	Location.	Date of accident.	Name of person.	Age of person.	Native or foreign born.
42	Kalamazoo Sled Co.....	Kalamazoo...	Jan. —, 1900..	Frank Myers.....	30	Nat.
88	Bryant Paper Co.....	"	Feb. 12, 1900..	Cora Flipse.....	14	"
138	John Brennan & Co.....	Battle Creek.	"	George Caldwell.....	83	"
156	E. Bement's Sons.....	Lansing.....	June 20, 1900..	Frank Dodge.....	16	"
502	Solvay Process Co.....	Delray.....	Feb. 26, 1900..	Robert Donley.....	28	For.
502	" " ".....	"	June 20, 1900..	John Finnegan.....	38	"
802	Lewis Globensky.....	Hillsdale.....	Nov. 14, 1899..	Paul Schlasing.....	30	"
838	Pierce-Williams Co.....	South Haven.	June 9, 1900..	A. A. Vinyard.....	38	Nat.
838	" " ".....	"	" 14, 1900..	Wm. Metcalf.....	17	"
843	Williams Hoop and Heading Co.....	Williams.....	Sept. 17, 1900..	A. Fralick.....	38	"
940	Grand Ledge Chair Co.....	Grand Ledge.	Oct. 9, 1900..	Floyd Morris.....	27	"
954	Pontiac Steam Laundry.....	Pontiac.....	May 21, 1900..	Miss A. Gilbert.....	18	"
960	Western Knitting Mills.....	Rochester.....	Sept. 19, 1900..	William Phillips.....	16	"
963	Monroe Cart Co.....	"	Apr. 28, 1900..	Matthew Ribble.....	17	"
966	Buckeye Stave Co.....	Romeo.....	Sept. 28, 1900..	H. Hurst.....	21	"
966	" " ".....	"	Oct. 3, 1900..	James Brownell.....	30	"
1065	The Deinzer Furniture Co.....	Monroe.....	Dec. 18, 1900..	John White.....	32	"

* Not given.

DEDUCTIONS FROM ACCIDENT TABLE.

Number of accidents reported in 1900.....	17
Number of accidents reported in 1899.....	19
Per cent of accidents in 1900.....	2.1
Per cent of accidents in 1899.....	2.5
Number of fatal accidents in 1900.....	1
Number of fatal accidents in 1899.....	2
Number of serious accidents in 1900.....	7
Number of serious accidents in 1899.....	8
Number of severe accidents in 1900.....	5
Number of severe accidents in 1899.....	7
Number of slight accidents in 1900.....	4
Number of slight accidents in 1899.....	2
Average number of days disabled for those injured.....	52
Number that were native born.....	14
Number that were foreign born.....	3
Number who were married.....	8
Number who were single.....	9
Number under 21 years old.....	6
Number under 16 years old.....	1

factories inspected in 1900.

Was accident fatal, serious, severe or slight.	Was person married or single.	Cause of accident and nature of injury.	How many days disabled.	Were any wages paid during disability.	Were any benefits received during disability.	Was machinery properly guarded.	Was accident due to carelessness.
Severe...	M	Hand caught in saw; lost two fingers.....	60	No..	No..	Yes.	Yes.
Fatal....	S	Stepped on moving elevator, head crushed.....	60	No..	No..	No..	No..
Serious...	M	Broke right arm; caught in flywheel.....	10	Yes.	"	Yes.	Yes.
Slight...	S	Body bruised; caught in line shaft.....	90	"	"	"	"
Serious...	"	Crosshead exploded; lost right arm.....	m	"	"	"	"
"	"	Run over by car and lost arm.....	90	No..	"	"	"
"	M	Caught in jointer; lost right arm.....	60	Yes.	Yes.	"	"
"	"	" " machinery; lost left arm.....	21	No..	No..	"	"
Slight...	S	Foot caught in elevator and broken.....	m	Yes.	Yes.	No..	"
Serious...	M	Belt caught in cutter; lost three fingers.....	90	No..	"	Yes.	"
Severe...	"	Caught hand; badly crushed.....	90	Yes.	"	"	"
"	S	" " fingers burned and smashed.....	m	No..	No..	"	"
Serious...	"	" " foot in belt; broke leg.....	30	Yes.	Yes.	"	"
Severe...	"	" " hand in saw; lost finger.....	15	No..	No..	"	"
Slight...	"	Lost two fingers; hand caught in saw.....	7	Yes.	Yes.	"	"
"	M	Finger cut off; caught in knife.....	m	"	"	"	"
Severe...	S	Caught hand in knife; cut three fingers badly.....					

m Yet disabled.

Age of oldest person injured, 38 years.
 Age of youngest person injured, 14 years.
 Average age of all persons injured, 26 years.

Number of persons who received wages during disability..... 9
 Number who did not receive wages during disability..... 7

Number of persons who received other benefits during disability..... 7
 Number who did not receive other benefits during disability..... 9

Number of factories where machinery was properly guarded..... 15
 Number where machinery was not properly guarded..... 2

Number of factories where accident was due to carelessness..... 16
 Number where accident was not due to carelessness..... 1

There were two less accidents reported this year than in 1899, the percentage being slightly less. The fatal, serious and severe accidents were each less, while those returned as "slight" were a little more. The average time those injured were disabled was 11 days less than in 1899.

The average age of those injured was seven years less than those injured in 1899. Six of these persons were under 21 years old and one was only 14. The oldest was 38 years old, there being three of that age. Sixteen of the accidents were due to carelessness, and in 15 of the factories where accidents occurred the machinery was properly guarded, only two being otherwise reported.

Of the 16 accidents not fatal, nine received wages during disability, the other seven receiving no wages. Seven received other benefits, such as insurance, doctors' bills, etc., the others receiving no such benefits.

THIRD DISTRICT,

COMPOSED OF THE COUNTIES

**Benzie,
Clinton,
Ionia,**

**Kent,
Lake,
Manistee,**

**Mason,
Muskegon,
Newaygo,**

**Oceana,
Ottawa,
Wexford.**

FRED J. ADDISON,

Deputy Inspector.

REPORT OF WORK IN THIRD DISTRICT.

OFFICE OF DEPUTY FACTORY INSPECTOR, }
Muskegon, Michigan, December 1, 1900. }

Hon. Joseph L. Cox,

Commissioner of Labor and Chief Factory Inspector, Lansing, Mich.:

Dear Sir—In compliance with your request, I hereby submit my fourth annual report as Deputy Factory Inspector for the Third District:

During the year I have inspected 812 institutions, a gain of 66 over the previous year, most of which are new institutions which have started up during the past year, which has been an exceptionally prosperous one in regard to new manufacturing institutions, 35 having started during the year 1900, several of which are very large and important manufacturing concerns.

The changes ordered for 1900 are 521, of which I am able to report 464 compliances as far as revisited. This is very gratifying, and in revisiting it is a very rare case where the orders have not been complied with.

The results of the past year's work have been very gratifying to me and has made my work seem more enjoyable than in any year past. The relations existing between the owners and operators and the inspector are such as to lighten the work and redound to the mutual benefit of the employers, employes and inspector alike, and helps to facilitate the work in charge.

SECTION 1—OVER-TIME.

Section 1 does not permit a male under 18 or a female under 21 to work over ten hours a day or sixty hours per week. Only in two instances have I found this section violated and in both cases the law was complied with cheerfully.

SECTION 2—CHILD LABOR.

Section 2 relates to child labor, and I am happy to say that this section of the law is almost universally obeyed in the Third District, and only a few violations have been found during the past year and those in new institutions where they were ignorant of the law. During the year only six children under 14 years were found at work as against 116 in 1899, and statements were ordered filed for children between the ages of 14 and 16 in only 20 instances, as against 96 in 1899, all of which have been complied with.

The question of child labor is an important one and is solving its own problems by practical demonstrations. During the past year this phase of the law has been a very pleasant one for me, as with the trouble,

trials and prosecutions of offenders in 1899, the scenes have changed and employers are now doing their utmost to co-operate with the inspector in the enforcement of this section of the law, as well as the others, which redound to their own benefit and protection.

SECTIONS 3, 4—HEALTH OF CHILDREN AND PHYSICAL FITNESS.

No violation of these sections have been found. All manufacturing institutions visited I have found the managers doing all in their power to make the work rooms as healthful and pleasant for their employes as possible.

SECTION 5—AUTOMATIC GATES.

During the past year I have made 17 orders for automatic gates and four orders for repairs, all of which have been found to be complied with as far as revisited.

SECTION 6—FIRE ESCAPES.

Fire escapes have been ordered in 10 instances and repairs ordered on five, all of which have been complied with.

SECTION 7—STAIR PROTECTION.

Stair protection has been ordered in only two instances and both have been complied with.

SECTION 8—DANGEROUS MACHINERY.

This section provides that all dangerous machinery shall be protected or guarded in the discretion of the inspector, and is one which calls for a great deal of study, experience and discretion on the part of the inspector, for no rule of guarding certain kinds of machinery can be made applicable to same kinds of machinery under different circumstances, and for this reason an inspector should be thoroughly convinced that he is right before he makes an order which might cripple the capacity of a machine and possibly make the running of same more hazardous to the operator.

Accidents in this district for 1900 have been only 21, as against 39 in 1899, which, taking into consideration the greater number of employes for 1900 over 1899, is commendable to the factory inspection department as well as the manufacturing institutions of the Third District.

During the year I have ordered setscrews guarded in 19 institutions, belts guarded in 11 and machinery guarded in 35 places, all of which have been complied with as far as revisited.

SECTION 9—EXHAUST FANS.

During the past year I have made orders for five new systems of exhaust fans for blowers, 12 orders for repairs and reconstruction, and eight orders for extension, all of which have been complied with as far as revisited.

Only in one instance have I experienced any difficulty in enforcing this law, and with the aid of act No. 202, Public Acts of 1899, I commenced proceedings against H. C. Cornelius, manager of the Wolverine Brass Company at Grand Rapids, for not complying with the law, and in this

case the law was sustained in police court by Judge Doyle and also in circuit court by Judge Perkins and a jury of twelve, who found Mr. Cornelius guilty and fined him \$25 and costs.

Among the important points of the law Judge Perkins ruled that the managers were responsible for the action of their men as far as using the blowers were concerned and should see to it that the men used them; that blowers lessening the capacity of work made no difference and upheld the law in every regard.

SECTION 10—SEPARATE CLOSETS FOR FEMALES.

The question of separate closets and wash rooms for females has taken considerable of my time during the past year and one that requires considerable tact on the part of an inspector, not only in finding out the true condition of affairs but also how to remedy them after the abuses have been located. It is a delicate question to handle, but one which I consider to be one of the most important sections in the factory law.

Females are being more generally employed in manufacturing establishments year after year, and as a rule managers of these institutions do nothing about providing the girls and women with these conveniences until their attention is called by the inspector. During the year orders have been made for separate closets in 16 cases, 14 of which have been complied with, the other two places not having yet been revisited.

I have also during the year ordered wash rooms and dressing rooms in two large institutions, which have been complied with.

LOW WATER ALARMS.

Act No. 209, Public Acts of 1899, provides that all stationary steam boilers shall be equipped with a low water alarm, etc. While this matter has taken considerable of my time, I cannot say that it has caused me much trouble, as out of 340 establishments where these appliances were ordered I am able to report as far as revisited that I have yet to find a single instance where the law has not been complied with, and am able to report 321 compliances to date.

While this law may be a step in the right direction, I am convinced that what the manufacturers and people of the State desire is a boiler inspection law and the licensing of engineers and firemen. It seems strange that a tug or small barge or steamboat, having on board perhaps a half-dozen people, shall be compelled to have its boiler regularly inspected and its engineers and firemen pass an examination in regard to their competency, while a manufacturing establishment can place the lives of hundreds of its employees in jeopardy by using any old thing, with no limit to age or capacity, with a boy or man as engineer or fireman who would be more in his element digging ditches or shoveling sand, and who knows little or nothing of steam and its uses and misuses.

The substantial manufacturers demand a law of this kind and the people should see to it that the coming legislature heeds their cry.

RECOMMENDATIONS.

First, State inspection of steam boilers and licensing of engineers and firemen.

Second, Make it a misdemeanor for any employe to remove, refuse or neglect to use any appliance required by law.

Third, Make canning factories and evaporating works come under same law as other manufacturers and not exempt them or give them any special privileges.

Fourth, That section 2 be changed so that no child between 14 and 16 years be allowed to work in factories who cannot read and write in the "English language."

Fifth, That hotels and theaters be placed under the jurisdiction of factory inspectors as far as fire escapes are concerned.

Sixth, That department stores shall come under the factory law so far as sections 2, 3, 4 and 10 are concerned.

In conclusion I would say, that never before have I realized the great responsibility which rests upon the factory inspector and what effect his actions and enforcements of the law has upon the future development of the young people under his immediate jurisdiction.

I have endeavored to faithfully perform my duties so as to work needless hardships to none, to keep the respect and esteem of employer and employe alike, and to do everything in my power to make the relations existing between employer and employe as cordial as possible and have them work together for their mutual welfare, and in this I am pleased to say that I have been fairly successful, and in a few instances have been able to mediate between employer and employe and satisfactorily brought about a compromise over a trivial matter which might have developed into a serious difficulty.

Yours very respectfully,

FRED J. ADDISON,

Deputy Inspector.

Inspection Book No. 1.

Inspection District No. 8.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1	Valley City Machine Co.....	Grand Rapids..	Machinery	23	23	10	26	12	\$1 91	Rent.	....
2	Powers-Tyson Printing Co.....	" "	Printing.....	13	13	9	26	12	2 00	"	....
3	Augustus J. Tucker.....	" "	Bookbinding.....	6	3	9½	26	12	1 33	"	....
4	F. Raniville	" "	Belting, etc.....	31	31	10	26	12	1 61	St'm.	No
5	Kelley Shirt Co.....	" "	Shirts	28	28	9½	26	12	1 25	Rent.	....
6	Berkey Seat Post Co.....	" "	Bicycle seats.....	9	9	10	26	12	1 34	"	....
7	The Fred Macey Co.....	" "	Furniture.....	113	113	9	26	12	1 53	Elec.	....
8	Albert G. Dickinson.....	" "	Printing.....	56	56	9	26	12	1 78	Rent.	....
9	G. R. Sash Pulley Co.....	" "	Pulleys.....	18	18	10	26	12	1 28	"	....
10	Rapid Hook & Eye Co.....	" "	Hooks, etc.....	6	6	9	26	12	83	None	....
11	F. A. Onderdonk.....	" "	Printing.....	10	10	10	26	12	1 81	Elec.	....
12	Barlow Bros.....	" "	Binding.....	22	20	10	26	12	1 55	"	....
13	Chas. A. Coye.....	" "	Tents, etc.....	10	10	10	26	12	1 80	"	....
14	Grand Central Tailoring Co.....	" "	Clothing.....	4	4	9½	26	12	1 75	None	....
15	G. J. Johnson Cigar Co.....	" "	Cigars.....	210	210	9	26	12	99	"	....
16	Grand Rapids Printing Co.....	" "	Printing.....	4	4	9	26	12	1 62	Elec.	....
17	Schull Printing Co.....	" "	".....	10	10	9	26	12	1 30	"	....
18	G. R. Lithographing Co.....	" "	".....	40	40	9	26	12	1 75	"	....
19	Groskopf Bros.....	" "	Trunks.....	7	5	10	26	12	1 80	"	....
20	Wolverine Motor Works.....	" "	Launches, etc.....	23	23	10	26	12	1 96	G & S	No
21	Nelson-Matter Furniture Co.....	" "	Furniture.....	350	350	10	26	12	1 43	St'm.	"
22	Butterworth & Lowe.....	" "	Machinery.....	50	45	10	26	12	2 22	"	....
23	A. H. DeLong & Co.....	" "	Blowpipes, etc.....	3	3	10	26	12	1 66	None	....
24	Michigan Vapor Stove Co.....	" "	Stoves, etc.....	135	135	12½	26	12	1 23	St'm.	No
25	Adelphia Plating Co.....	" "	Plating.....	4	4	10	26	12	1 50	Rent.	....
26	Bissell Carpet Sweeper Co.....	" "	Sweepers.....	300	285	10	26	11	1 40	St'm.	No
27	Adolph Leitelt Iron Works.....	" "	Machinery.....	90	90	10	26	12	1 77	"	....
28	Bouchard Bros.....	" "	Moulding.....	4	2	10	26	12	1 75	Rent.	....
29	G. R. Electro-Plating Co.....	" "	Plating.....	6	3	10	26	12	2 00	"	....
30	The Wagemaker Furniture Co...	" "	Specialties.....	13	12	10	26	12	1 46	"	....
31	Dygart Printing Co.....	" "	Printing.....	5	3	9	26	12	1 50	"	....
32	Elliott Button Fastener Co.....	" "	Fasteners.....	20	11	10	26	12	1 82	"	....
33	G. R. Electrotpe Co.....	" "	Electrotypes..	8	8	9½	26	12	2 13	"	....
34	New England Furniture Co.....	" "	Furniture.....	250	240	10	26	12	1 14	St'm.	No
35	A. L. Davis.....	" "	Printing.....	3	3	10	26	12	1 50	Elec.	....
36	J. H. Donker.....	" "	Caps.....	5	4	10	26	12	94	None	....
37	Mueller & Slack.....	" "	Upholstering.....	50	40	10	26	12	1 87	"	....
38	De Standaard.....	" "	Newspapers, etc.....	5	5	10	26	12	1 20	Elec.	....
39	White Printing Co.....	" "	Printing.....	8	8	9	26	12	1 50	"	....
40	G. R. Cigar Co.....	" "	Cigars.....	7	7	8	26	12	1 86	None	....
41	Valley City Mills.....	" "	Flour.....	35	35	24	26	12	1 80	S & W	No
42	Globe Mills.....	" "	Feed, etc.....	13	13	24	26	12	84	Water	....
43	Model Mills.....	" "	Flour.....	13	13	22	26	12	1 54	S & W	No
44	G. R. Edge Tool Works.....	" "	Knives, etc.....	12	12	10	26	12	1 50	"	....
45	Brass & Iron Bed Co.....	" "	Beds.....	25	17	10	26	12	2 07	St'm.	"
46	Alex. Dodds.....	" "	Machinery.....	15	13	10	26	12	1 54	W & F	....
47	G. R. Bicycle Grip Co.....	" "	Grips.....	50	50	10	26	12	1 58	S & W	No
48	Consolidated Street R'y Co.....	" "	Repairs, etc.....	18	18	18	30	10	1 17	St'm.	"
49	Heyman & Co.....	" "	Showcases.....	4	4	10	26	12	1 75	Elec.	....
50	American Tailors.....	" "	Clothing.....	10	6	9½	26	12	1 66	None	....

* Running day and night.

° Running 7 days per week.

^ Running over 10 hours per day.

Inspection Book No. 2.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. [for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
51	Berkey & Gay Furniture Co....	Grand Rapids.	Furniture....	500	480	12	26	12	\$1 67	St'm.	No
52	Z. E. Allen.....	" "	Desks, etc....	45	45	10	26	12	1 29	"	"
53	American Machinery Co.....	" "	Machinery....	20	20	10	26	12	2 30	Elec.	"
54	Cycloid Cycle Co.....	" "	Bicycles, etc....	24	15	8	26	12	1 47	W'tr	"
55	Royal Furniture Co.....	" "	Furniture....	171	171	10	26	12	1 52	St'm.	No
56	Fiebig Wagon Co.....	" "	Wagons, etc....	6	6	10	26	12	1 83	None	"
57	Julius Rathbun.....	" "	"	5	5	10	26	12	2 20	"	"
58	F. Letellier & Co.....	" "	Finish.....	35	35	10	26	12	1 52	St'm.	No
59	The Wernicke Co., Factory B....	" "	Bookcases....	36	36	10	26	12	1 45	"	"
60	Grand Rapids Foundry Co.....	" "	Castings....	35	35	10	26	12	2 14	Gas..	"
61	Wolverine Brass Co.....	" "	Plumbing....	26	26	10	26	12	1 61	E & S	No
62	Christenson Baking Co.....	" "	Baked goods....	8	8	10	26	12	2 19	St'm.	"
63	Ryan Rattan Works.....	" "	Rattan goods....	5	5	10	26	12	1 20	None	"
64	Hoebeke & Co.....	" "	Rags, etc....	15	10	10	26	12	1 20	"	"
65	Oriel Cabinet Co.....	" "	Furniture....	484	484	10	26	12	1 34	St'm.	Yes
66	Chase Chair Co.....	" "	Chairs.....	30	14	10	26	12	1 27	"	No
67	Grand Rapids Piano Case Co.....	" "	Piano cases....	90	80	10	26	12	1 56	"	"
68	Grand Rapids Chair Co.....	" "	Furniture....	420	420	10	26	12	1 43	"	"
69	I. L. Quimby Factory.....	" "	etc.....	60	49	10	26	12	1 31	"	"
70	John Dupree & Co.....	" "	Finish.....	25	18	9	26	12	1 67	"	Yes
71	Dale Bros., Excelsior Co.....	" "	Excelsior....	14	14	9	26	12	1 50	"	No
72	Michigan Barrel Co.....	" "	Refrigerators	200	200	10	26	12	1 17	"	Yes
73	Wadell Manufacturing Co.....	" "	Trim, etc....	125	112	10	26	12	1 43	"	No
74	Central Boiler Works.....	" "	Boilers.....	16	8	9	26	12	1 90	"	"
75	Chicago Laundry.....	" "	Laundry.....	17	17	10	26	12	1 12	"	"
76	Grand Rapids Brewing Co.....	" "	Beer.....	45	40	10	26	12	1 94	"	Yes
77	Grand Rapids Brewing Co.....	" "	Bottle beer..	60	26	10	26	12	1 08	"	"
78	C. A. Scheufler.....	" "	Tin work, etc.	6	5	9	26	12	1 40	None	"
79	C. G. Baisch.....	" "	Cutlery, etc..	4	4	10	26	12	1 75	Elec.	"
80	Stephan Printing Co.....	" "	Printing.....	5	5	9	26	12	1 50	"	"
81	Mrs. A. Truesch.....	" "	Cigars.....	5	4	8	26	12	1 62	None	"
82	E. R. Wiersma & Co.....	" "	"	13	13	8	26	12	1 81	"	"
83	David Forbes.....	" "	Stencils.....	4	4	9	26	12	1 62	"	"
84	Paul Eifert.....	" "	Trunks, etc..	4	4	10	26	12	1 50	"	"
85	Ed. L. Smith.....	" "	Cigars.....	3	2	8	26	12	1 50	"	"
86	H. A. Toren.....	" "	Printing.....	4	4	9	26	12	1 25	Elec.	"
87	Martin & Wurzburg.....	" "	"	6	6	9	26	12	2 50	"	"
88	West Michigan Printing Co.....	" "	"	16	16	9	26	12	1 56	"	"
89	Seymour & Muir Printing Co.....	" "	"	15	15	9	26	12	1 53	Gas..	"
90	George A. Cloyes.....	" "	Elec. goods..	2	2	10	26	12	2 00	Elec.	"
91	National Projectile Works.....	" "	Bullets, etc..	3	3	9	26	12	2 83	"	"
92	George H. Gee.....	" "	Slot machin's	3	I	9	26	12	1 12	Elec.	"
93	J. Chilver & Co.....	" "	Binding.....	25	25	9	26	12	1 12	Elec.	"
94	Reynders Printing Co.....	" "	Printing.....	6	5	10	26	12	1 25	"	"
95	George S. Smith.....	" "	Office fixtures	5	5	10	26	12	1 33	"	"
96	Globe Knitting Works.....	" "	Underwear...	30	30	10	26	12	97	"	"
97	A. J. Brown Seed Co.....	" "	Seeds.....	30	25	10	26	12	92	"	"
98	Bodelack & Vanselow.....	" "	Sculpture....	4	3	9	26	12	1 75	None	"
99	Albert Leslie.....	" "	Printing.....	3	3	9	26	12	2 17	Elec.	"
100	A. Zwingeberg.....	" "	Fur garments	6	3	10	26	12	1 43	None	"

* Running over 10 hours per day.

Inspection Book No. 3.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
101	Grand Rapids Democrat.....	Grand Rapids..	Newspapers..	34	34	9	30	12	\$1 87	Elec.	....
102	Weatherly & Fulte.....	" " "	Plumbing, etc.	65	50	9	26	12	2 08	E & S	No
103	Mercer & Ziesse.....	" " "	" " "	5	5	9	26	12	2 80	Elec.	....
104	Dean-Hicks Printing Co.....	" " "	Printing, etc.	75	54	9	26	12	1 22	"	....
105	E. C. Meade.....	" " "	Cigars.....	3	2	8	26	12	2 37	None	....
106	Tandler & Torbe.....	" " "	" " "	8	8	8	26	12	1 51	"	....
107	John Cummings.....	" " "	Wagons, etc.	7	7	10	26	12	1 72	"	....
108	City Bakery.....	" " "	Baked goods..	3	3	10	26	12	1 33	"	....
109	E. J. Herrick.....	" " "	" " "	3	3	10	26	12	1 67	"	....
110	The Evening Press Co.....	" " "	Newspapers..	75	75	8½	26	12	2 40	E & S	Yes
111	Stanton Printing Co.....	" " "	Printing.....	14	13	9	26	12	2 30	Elec.	....
112	Reed Engraving Co.....	" " "	Engravings..	12	10	9	26	12	1 60	"	....
113	A. W. Anderson.....	" " "	Plating.....	4	3	10	26	12	1 33	"	....
114	S. T. Kinsey.....	" " "	Shirts.....	30	22	10	26	12	1 14	"	....
115	Simmons Knitting Co.....	" " "	Underwear..	18	18	10	26	12	1 45	"	....
116	Harold-Bertsch Shoe Co.....	" " "	Shoes.....	50	49	10	26	12	1 10	"	....
117	Western Shirt Co.....	" " "	Shirts.....	15	9	9½	26	12	1 59	"	....
118	Tisch Bros.....	" " "	Boxes.....	22	21	10	26	12	1 09	"	....
119	G. R. Knitting Co.....	" " "	Underwear..	40	33	10	26	12	70	"	....
120	G. R. Paper Box Co.....	" " "	Boxes.....	68	68	10	26	12	88	"	....
121	Grand Rapids Herald Co.....	" " "	Newspapers..	49	49	8½	30	12	2 47	"	....
122	The Workman Printing Co.....	" " "	Printing, etc.	6	6	9	26	12	1 66	"	....
123	H. Schneider & Co.....	" " "	Cigars.....	15	14	8	26	12	1 80	None	....
124	J. Platte.....	" " "	Umbrellas...	3	3	9	26	12	1 41	"	....
125	Gardiner & Baxter.....	" " "	Shirts.....	20	20	9	26	12	1 15	St'm.	Yes
126	Baxter's Steam Laundry.....	" " "	Laundry.....	100	70	10	26	12	1 19	"	....
127	Foster, Stevens & Co.....	" " "	Tin work, etc.	6	6	10	26	12	2 09	Elec.	....
128	Spring & Co.....	" " "	Carpets.....	4	4	9	26	12	1 25	None	....
129	Studley & Barclay.....	" " "	Rubber goods	4	4	10	26	12	1 50	"	....
130	A. Hirth & Son.....	" " "	Cut stone....	8	8	9	26	12	2 50	"	....
131	Hopson-Haftencamp Co.....	" " "	Iron work, etc	15	15	9	26	12	1 67	"	....
132	Michigan Iron Works.....	" " "	Machinery...	50	41	10	26	12	1 71	S & W	No
133	King Carpet Sweeper Co.....	" " "	Sweepers.....	25	3	10	26	12	1 33	Elec.	....
134	Jennings Flavoring Extract Co.	" " "	Perfumes, etc	15	15	10	26	12	1 07	None	....
135	Ideal Clothing Co.....	" " "	Clothing.....	90	90	10	26	12	1 25	Elec.	....
136	Gd. Rap. Paint & Wood Fin. Co.	" " "	Paint, etc...	5	5	9	26	12	2 60	St'm.	No
137	Wm. A. Berkey Furniture Co.....	" " "	Furniture...	180	180	10	26	12	1 67	"	....
138	A. Wood Carriage Co.....	" " "	Carriages....	15	15	10	26	12	1 60	None	....
139	A. L. Holcomb.....	" " "	Saws.....	3	2	10	26	12	1 80	"	....
140	Gd. Rapids Refrigerator Co.....	" " "	Refrigerators	250	206	10	26	12	1 26	St'm.	Yes
141	Whittier Broom Co.....	" " "	Brooms.....	13	13	10	26	12	1 12	None	....
142	Edison Light Co.....	" " "	Electricity...	35	34	24	30	12	1 94	St'm.	No
143	Daniel Lynch.....	" " "	Extracts.....	9	9	10	26	12	1 33	None	....
144	Morse Bakery.....	" " "	Baked goods..	4	4	18	26	12	1 81	"	....
145	Tradesman Co.....	" " "	Printing.....	42	42	10	26	12	1 43	Elec.	....
146	J. W. York & Sons.....	" " "	Instruments..	30	30	10	26	12	1 40	"	....
147	Rindge, Kalmback, Logie & Co.	" " "	Shoes.....	94	94	10	26	12	1 59	"	....
148	A. E. Brooks & Co.....	" " "	Candy.....	27	27	10	26	12	1 59	"	....
149	Putnam Candy Co.....	" " "	" " "	135	71	9	26	12	1 00	St'm.	No
150	Millard Steam Laundry.....	" " "	Laundry.....	8	8	10	26	12	88	"	....

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 4.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
151	Henson & Johnson.....	Grand Rapids.	Printing.....	8	8	9	26	12	\$1 54	Elec.	....
152	Hirth, Krause & Co.....	" "	Leather, etc.	11	11	9	26	12	1 45	"	....
153	De Boe, King & Co.....	" "	Extracts.....	5	5	9	26	12	85	None	....
154	Collins Hook & Eye Co.....	" "	Hooks, etc.....	29	29	10	26	12	93	Elec.	....
155	New York Cap Mfg. Co.....	" "	Caps.....	8	8	10	26	12	1 15	None	....
156	A. Vandenberg.....	" "	Harnesses.....	8	6	10	26	12	1 62	"	....
157	Gd. Rapids Custom Shirt Co.....	" "	Shirts.....	25	19	9½	26	12	1 21	Elec.	....
158	Rookus Printing Co.....	" "	Printing.....	8	8	10	26	12	85	Gas.	....
159	Gregor's Steam Dye House.....	" "	Dyeing.....	10	10	10	26	12	85	St'm.	No
160	O. L. Palmer.....	" "	Shirts.....	3	3	9	26	12	1 33	Elec.	....
161	Michigan Skirt & Corset Co.....	" "	Corsets, etc.	9	7	10	26	12	1 02	"	....
162	J. A. Wolcott Regalia Co.....	" "	Regalias.....	6	6	9	26	12	83	None	....
163	Fasoldt Bros.....	" "	Clothing.....	25	21	10	26	12	95	Elec.	....
164	Witters Laundry.....	" "	Laundry.....	15	6	10	26	12	1 50	St'm.	No
165	Grand Rapids Engraving Co.....	" "	Printing, etc	50	49	9	26	12	1 37	Elec.	....
166	The Wernicke Co.....	" "	Book cases...	90	90	10	26	12	1 30	St'm.	No
167	Central Furniture Co.....	" "	Desks, etc....	41	41	10	26	12	1 40	"	....
168	Wm. Brummeler & Son.....	" "	Rags, etc.....	25	14	10	26	12	93	None	....
169	Jultes, Stuck & Co.....	" "	Finish.....	15	12	9½	26	12	1 08	St'm.	No
170	Gd. Rapids Wooden Shoe Co.....	" "	Shoes.....	3	3	10	26	12	1 75	None	....
171	Grand Rapids Kolatona Co.....	" "	Kolatona.....	3	3	10	26	12	1 70	"	....
172	F. L. Blake.....	" "	Baked goods.	15	12	20	26	12	1 67	"	....
173	U. Grant Clark.....	" "	Printing.....	9	8	10	26	12	1 09	Elec.	....
174	Ford Vendor Co.....	" "	Machines.....	6	6	10	26	12	1 35	"	....
175	Durfee Embalming Fluid Co.....	" "	Emb'ng fluid.	13	13	9½	26	12	1 70	St'm.	No
176	Geo. G. Steketee.....	" "	Medicines.....	6	6	10	26	12	1 29	None	....
177	H. Radamaker & Sons.....	" "	Novelties.....	30	19	10	26	12	1 42	St'm.	No
178	Stiles Bros.....	" "	Dressed lum.	22	22	10	26	12	1 52	"	....
179	H. M. Reynolds & Son.....	" "	Roofing.....	8	8	10	26	12	1 59	"	....
180	American Steam Laundry.....	" "	Laundry.....	100	85	10	26	12	1 15	"	Yes
181	Sligh Furniture Co.....	" "	Furniture.....	300	300	10	26	12	1 37	"	No
182	Standard Cabinet Co.....	" "	Tables, etc....	10	6	10	26	12	2 16	Rent.	....
183	Jacob Reelman.....	" "	Dressed lum.	18	18	10	26	12	1 22	St'm.	No
184	Michigan Chair Co.....	" "	Chairs.....	350	306	10	26	12	1 52	"	....
185	Retting & Sweet.....	" "	Furniture.....	90	73	10	26	12	1 75	"	....
186	Stickley Bros. Co.....	" "	Chairs, etc....	275	187	10	26	12	1 55	"	....
187	Luce Furniture Co.....	" "	Suits.....	625	601	10	26	12	1 02	"	Yes
188	Grand Rapids Candy Co.....	" "	Candy.....	15	10	10	26	12	1 27	"	No
189	James La More.....	" "	Grille work...	3	3	10	26	12	1 16	None	....
190	Michigan Brush Co.....	" "	Brushes.....	4	4	10	26	12	1 80	"	....
191	Valley City Shirt Co.....	" "	Shirts.....	5	5	10	26	12	70	"	....
192	Chicago Rug Co.....	" "	Rugs.....	4	4	10	26	12	78	"	....
193	Heth Bros.....	" "	Iron work.....	5	5	10	26	12	1 50	"	....
194	M. V. Henderson & Son.....	" "	Feed.....	10	10	10	26	12	1 30	"	....
195	Clark & Jackson Lumber Co.....	" "	Finish.....	20	I	....	....	....	....	....	....
196	John Mack.....	" "	Wagons.....	8	"	....	....	....	....	....	....
197	American Carving & Mfg. Co...	" "	Moulding.....	12	10	10	26	12	1 30	St'm.	No
198	Anti-Kalsomine Co.....	" "	Anti-kalsomine	37	37	10	26	12	1 35	"	....
199	Alabastine Mills.....	" "	Alabastine.....	50	15	10	26	12	1 67	"	....
200	Grand Rapids Brick Co.....	" "	Brick.....	32	I	....	....	....	....	....	....

a Running over 10 hours per day.

Inspection Book No. 5.

Inspection District No. 8.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam is there low water alarm, and is it in good condition?
201	Grand Rapids Glue Co.....	Grand Rapids.	Glue, etc.....	8	8	10	26	12	\$1 62	St'm.	No
202	Gd. Rapids Fancy Furniture Co..	"	Furniture.....	120	112	10	26	12	1 48	"	Yes
203	G. R. & I. R. R. shops.....	"	Repairs.....	350	344	9 1/2	26	12	1 81	"	No
204	Vulcan Iron Works.....	"	Castings.....	16	14	8	26	12	1 50	Gas.	.....
205	Howard Thomas & Son.....	"	Canned goods	300	300	10	26	6	67	St'm.	Yes
206	George R. Reeves.....	"	Dressed lum..	12	1	.....	.....	.....	.....	.....	.....
207	Grand Rapids Gas Light Co.....	"	Gas.....	140	104	22	26	12	1 78	St'm.	No
208	Grand Rapids Felt Boot Co.....	"	Felt boots.....	150	98	10	26	12	1 35	"	"
209	Sintz Gas Engine Co.....	"	Engines.....	33	33	10	26	12	1 91	"	Yes
210	Boston Rug Co.....	"	Rugs.....	6	6	10	26	12	96	None	.....
211	Grand Rapids Malleable Co.....	"	Castings.....	400	175	10	26	.....	1 43	St'm.	No
212	Fuller & Rice Lumber & Mfg. Co	"	Finish.....	136	136	10	26	12	1 18	"	Yes
213	Sherwood Royston Co.....	"	Hats.....	250	248	10	26	12	1 02	"	No
214	Gunn Furniture Co.....	"	Desks.....	200	200	10	26	12	1 37	"	"
215	Kent Furniture Mfg. Co.....	"	Furniture.....	300	266	10	26	12	1 41	"	"
216	Gd. Rapids Carved Moulding Co.	"	Mouldings.....	20	12	10	26	12	2 08	"	"
217	Palmer Laundry.....	"	Laundry.....	25	25	10	26	12	1 12	"	"
218	Kent Stone Co.....	"	Stone.....	18	1	.....	.....	.....	.....	"	"
219	Grand Rapids Veneer Works.....	"	Veneer.....	225	225	10	26	12	1 47	"	"
220	Haney School Furniture Co.....	"	Furniture.....	75	55	10	26	12	1 36	"	"
221	James Bayne Co.....	"	Printing, etc.	20	20	9	26	12	2 60	Elec.	.....
222	C. O. & A. D. Porter.....	"	Machinery.....	14	14	10	26	12	2 07	Gas.	.....
223	Fox Machine Co.....	"	" etc.	150	134	10	26	12	1 80	St'm.	Yes
224	Grand Rapids Panel Co.....	"	Graining app.	4	3	10	26	12	1 83	Gas.	.....
225	Perkins & Co.....	"	Machinery.....	115	113	10	26	12	1 47	St'm.	No
226	H. W. Booser.....	"	Novelties.....	2	2	10	26	12	1 75	None	.....
227	Rempis & Gallmeyer.....	"	Castings.....	22	22	10	26	12	1 91	Elec.	.....
228	Belknap Wagon Co.....	"	Wagons, etc.	50	45	10	26	12	1 40	St'm.	No
229	Peninsular Plating Works.....	"	Plating.....	8	7	10	26	12	1 85	Elec.	.....
230	C. B. Metzger.....	"	Bicycles, etc.	20	14	10	26	12	1 29	"	.....
231	Brown & Sehler.....	"	Harnesses.....	13	13	10	26	12	1 80	"	.....
232	Haven & Jordan.....	"	Wire goods.....	3	3	10	26	12	1 67	None	.....
233	Frank Brechting.....	"	Wagons, etc.	5	5	10	26	12	1 60	"	.....
234	Harrison Wagon Co.....	"	".....	210	210	10	26	12	1 35	St'm.	No
235	Michigan Art Carving Co.....	"	Furn. ornaments	22	18	10	26	12	1 67	"	"
236	Halladay Lumber Co.....	"	Lumber.....	48	48	12	26	12	1 90	"	"
237	American School Furniture Co..	"	Furniture, etc.	525	510	10	26	12	1 63	"	"
238	J. W. Fox Excelsior Co.....	"	Excelsior.....	13	13	10	26	12	1 31	"	"
239	A. Coye & Co.....	"	Wood turn'g.	3	3	10	26	12	1 67	Rent.	.....
240	C. B. Clark.....	"	Specialties.....	12	12	10	26	12	1 33	"	.....
241	Novelty Wood Works.....	"	Ornaments.....	15	14	10	26	12	1 57	"	.....
242	Gd. Rapids Wood Carving Co.....	"	".....	40	35	10	26	12	1 71	St'm.	No
243	Baldwin, Tuthill & Bolton.....	"	Machinery.....	60	60	10	26	12	1 40	Rent.	.....
244	Paine Bedding Co.....	"	Couches, etc.	60	45	10	26	12	1 84	St'm.	No
245	Widdcomb Furniture Co.....	"	Furniture.....	456	456	10	26	12	1 53	"	"
246	John Widdcomb Co.....	"	".....	250	250	10	26	12	1 26	"	"
247	Grand Rapids Book Case Co.....	"	Book cases.....	50	50	10	26	12	1 66	"	"
248	Mueller & Slack.....	"	Furn. frames	9	9	10	26	12	1 67	Rent.	.....
249	Gessler & Fritz.....	"	Wagons, etc.	8	8	10	26	12	1 38	St'm.	No
250	Chocolate Cooler Co.....	"	Coolers.....	12	10	10	26	12	1 40	Rent.	.....

• Running day and night.

• Running 7 days per week.

• Running over 10 hours per day.

Inspection Book No. 6.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
251	Brown & Sehler.....	Grand Rapids..	Harnesses.....	25	25	10	26 12	\$1 72	Elec.	....
252	L. G. Staddon.....	" "	Woolen goods.....	5	2	10	26 12	1 50	St'm.	No	
253	M. Braudy.....	" "	Old iron.....	15	15	10	26 12	1 80	None	....
254	F. C. Hammerschmidt.....	" "	Baked goods.....	11	11	10	26 12	1 73	"	....
255	Slooter Bros.....	" "	Brooms.....	6	6	10	26 12	1 70	"	....
256	John VanDuren.....	" "	"	4	4	10	26 12	1 69	"	....
257	J. B. Folger & Son.....	" "	Soft drinks.....	8	6	10	26 12	1 60	F & S	No	
258	Gr. Rapids Steam Laundry.....	" "	Laundry.....	7	7	10	26 12	1 00	St'm.	....
259	Petersen Brewing Co.....	" "	Beer.....	8	8	10	26 12	2 00	"	Yes	
260	Star Knitting Works.....	" "	Underwear.....	80	80	10	26 12	79	"	No	
261	Phoenix Furniture Co.....	" "	Furniture.....	450	450	10	26 12	1 67	"	....
262	Chas. Schmidt & Bro.....	" "	Cut stone.....	9	9	9	26 12	2 22	Elec.	....
263	Star Roller Mills.....	" "	Flour.....	21	21	24	26 12	1 90	St'm.	No	
264	West Side Iron Works.....	" "	Machinery.....	5	5	10	26 12	1 70	Elec.	....
265	McDonald & Carroll.....	" "	Boilers.....	6	6	10	26 12	1 75	Rent.	....
266	A. Van Dort.....	" "	Printing.....	3	3	10	26 12	92	None	....
267	Crescent Machine Works.....	" "	Machinery.....	18	18	10	26 12	2 03	Gas.	....
268	Benedict Furniture Clamp Co.....	" "	Clamps.....	3	2	10	26 12	1 88	"	....
269	Gd. Rapids Hand Screw Co.....	" "	Showcases.....	35	35	11	26 12	1 90	St'm.	No	
270	Eureka Fluff Rug Co.....	" "	Rugs.....	10	10	10	26 12	1 30	Elec.	....
271	Michigan Moulding Mfg. Co.....	" "	Rope, etc.....	5	3	10	26 12	1 43	"	....
272	Powers & Walker Casket Co.....	" "	Caskets, etc.....	50	49	10	26 12	1 43	St'm.	Yes	
273	H. B. Feather Co.....	" "	Mattresses.....	25	25	10	26 12	1 04	Elec.	....
274	Crescent Roller Mills.....	" "	Flour.....	32	32	24	26 12	1 97	S & W	No	
275	Gd. Rapids Brush Co.....	" "	Brushes.....	300	169	10	25 12	97	"	Yes	
276	Harring & Atwood.....	" "	Castings.....	11	11	10	26 12	2 55	Wat'r	....
277	Gd. Rap. Elec. Lt. & Power Co.....	" "	Electricity.....	23	23	24	26 12	2 17	St'm.	Yes	
278	Gypsum Product Mfg. Co.....	" "	Plaster, etc.....	10	9	10	26 12	1 44	Wat'r	....
279	F. C. Miller.....	" "	Boxes.....	35	30	10	26 12	1 37	St'm.	Yes	
280	Ocker & Ford Mfg. Co.....	" "	Finish.....	50	50	10	26 12	1 80	"	No	
281	Gd. Rapids Clock & Mantle Co.....	" "	Clocks, etc.....	35	30	10	26 12	1 87	Elec.	....
282	Aldine Mfg. Co.....	" "	Grates, etc.....	30	29	10	26 12	1 68	St'm.	No	
283	Grand Rapids Brass Co.....	" "	Furn. trim.....	300	190	10	26 12	1 53	"	Yes	
284	Friction Set Works.....	" "	Machinery.....	10	9	10	26 11	1 67	Gas.	....
285	F. Hartman.....	" "	Scales, etc.....	5	5	10	26 12	1 60	"	....
286	H. J. Hartman.....	" "	Castings.....	22	22	10	26 12	1 81	"	....
287	Gd. Rapids Stave Co.....	" "	Staves, etc.....	78	78	20	26 12	1 48	St'm.	Yes	
288	D. R. Parish.....	" "	Cider, etc.....	3	1	10	26 12	1 20	Elec.	....
289	V. C. Carpet Cleaning Works.....	" "	Carpets.....	5	5	10	26 12	2 50	"	....
290	Frank Edge & Co.....	" "	Saws, etc.....	3	3	10	26 12	1 50	"	....
291	J. G. Alexander Mfg. Co.....	" "	Novelties.....	3	3	10	26 12	1 50	"	....
292	Valley City Syrup Co.....	" "	Syrup, etc.....	15	1	10	26 12	1 62	None	....
293	Toledo Bottling Works.....	" "	Beer.....	6	6	10	26 12	1 75	"	....
294	J. M. S. Cigar Co.....	" "	Cigars.....	4	4	8	26 12	1 58	"	....
295	W. J. Jones.....	" "	"	3	3	8	26 12	1 58	"	....
296	Hill's Domestic Bakery.....	" "	Baked goods.....	15	15	10	26 12	1 73	"	....
297	H. D. Plumb.....	" "	Flour, etc.....	5	5	10	26 12	1 50	Wat'r	....
298	Michigan Leather Co.....	" "	Leather.....	47	47	10	26 12	1 76	St'm.	Yes	
299	Gd. Rapids Leather Co.....	" "	"	25	25	10	26 12	1 80	"	....
300	Cordes & Dunton.....	" "	Lumber, etc.....	10	10	10	26 4	1 60	"	No	

* Running day and night.

° Running 7 days per week.

° Running over 10 hours per day.

Inspection Book No. 7.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number of employees idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
301	Stow & Davis Furniture Co.....	Grand Rapids..	Tables.....	68	68	10	26 12	1 29	St'm.	No		
302	Hart Mirror Plate Co.....	" "	Mirrors.....	50	35	10	26 12	1 66	"	Yes		
303	Gd. Rapids Bicycle Co.....	" "	Bicycles.....	200	150	10	26 12	1 67	"	"		
304	Hake Mfg. Co.....	" "	Ornaments.....	86	86	10	26 12	1 55	"	No		
306	Valley City Desk Co.....	" "	Desks.....	150	135	10	26 12	1 29	"	"		
306	Ornamental Stamping Works.....	" "	Ceiling, etc.....	40	9	10	26 12	2 33	"	"		
307	Wallin Leather Co.....	" "	Leather.....	45	45	10	26 12	1 67	"	Yes		
308	Edwin S. Kiefer.....	" "	Pulled wool.....	15	15	10	26 12	1 67	None	"		
309	W. H. Pettit.....	" "	Baby buggies.....	20	15	10	26 12	1 20	"	"		
310	W. T. Bentley.....	" "	Barrels.....	14	14	10	26 12	1 57	"	"		
311	The O. & W. Thum Co.....	" "	Fly paper.....	100	68	10	26 12	1 47	St'm.	Yes		
312	National Crayon Co.....	" "	Chalk.....	11	11	20	26 12	1 27	"	"		
313	Independent Crayon Co.....	" "	".....	5	5	10	26 12	1 30	"	No		
314	Gd. Rapids Plaster Co.....	" "	Plaster, etc.....	20	17	16	26 9	1 77	"	Yes		
315	Gd. Rapids Gypsum Works.....	" "	".....	35	28	16	26 12	1 68	"	"		
316	Midland Plaster & Cement Co....	" "	".....	30	30	10	26 12	1 73	"	No		
317	Con. Street Ry. Co., upper house	" "	Repairs.....	13	13	10	26 12	1 38	None	"		
318	Collins Brick & Tile Co.....	" "	Brick, etc.....	35	30	10	26 12	1 67	St'm.	No		
319	Con. Brick & Tile Co.....	" "	".....	40	1	"	"	"	"	Yes		
320	Gd. Rapids Pottery Co.....	" "	Flower pots.....	6	"	"	"	"	"	"		
321	Columbian Steam Laundry.....	" "	Laundry.....	10	8	10	26 12	1 90	St'm.	No		
322	Consolidated Chemical Co.....	" "	Chemicals.....	10	10	10	26 12	1 00	None	"		
323	A. Kuppenheimer.....	" "	Cigars.....	8	8	8	26 12	1 56	"	"		
324	Hardware Supply Co.....	" "	Supplies.....	3	3	10	26 12	1 43	"	"		
325	Gd. Rapids Match Co.....	" "	Matches.....	125	41	10	26 4	1 21	St'm.	Yes		
326	National Biscuit Co.....	" "	Baked goods.....	150	150	10	26 12	1 27	"	"		
327	Heys & Slater.....	" "	Cut stone.....	8	6	9	26 12	2 50	"	No		
328	Wolverine Spice Co.....	" "	Spices, etc.....	8	8	10	26 12	1 25	Elec.	"		
329	Granite Wall Plaster Co.....	" "	Plaster.....	5	5	10	26 6	1 60	"	"		
330	Grand Rapids Desk Co.....	Muskegon..	Desks, etc.....	225	225	10	26 12	1 18	St'm.	Yes		
331	Enterprise Brass Works.....	" "	Brass work.....	6	6	10	26 12	1 12	"	"		
332	Morton Mfg. Co.....	" "	Machinery.....	66	66	10	26 12	1 39	"	No		
333	Michigan Washing Machine Co..	" "	Tubs, etc.....	27	20	10	26 12	1 40	"	"		
334	Alaska Refrigerator Co.....	" "	Refrigerators.....	280	261	10	26 11	1 28	"	Yes		
335	Shaw Electric Crane Co.....	" "	Cranes.....	240	230	10	26 12	1 67	"	"		
336	Enterprise Foundry Co.....	" "	Castings.....	55	55	10	26 12	1 18	"	No		
337	Standard Malleable Iron Co.....	" "	".....	300	127	64	26 12	1 76	"	Yes		
338	Electric Alarm Co.....	" "	Machinery.....	15	8	10	26 12	1 45	"	No		
339	Gray Bros. Mfg. Co.....	" "	Specialties.....	75	50	10	26 12	1 42	"	Yes		
340	Curled Hair Works.....	" "	Curled hair.....	7	7	12	26 12	1 45	"	No		
341	Chemical Fire Engine Co.....	" "	Engines.....	36	30	10	26 12	1 30	"	"		
342	Muskegon Stock Yards.....	" "	Meats.....	13	13	10	26 12	1 42	"	"		
343	Muskegon Valley Furn. Co.....	" "	Furniture.....	150	150	10	26 12	1 11	"	"		
344	McCracken & Hovey Car Co.....	" "	Cars.....	200	1	"	"	"	"	"		
345	Munroe Mfg. Co.....	" "	Boxes, etc.....	100	85	10	26 12	1 07	St'm.	No		
346	Sarjent Mfg. Co.....	" "	Furniture, etc.....	55	41	10	26 12	1 00	"	Yes		
347	Wm. Heap.....	" "	Woodwork.....	20	10	10	26 12	1 30	None	"		
348	James Ryan.....	" "	Barrels.....	5	3	9	26 12	1 92	"	"		
349	G. R. Ross.....	" "	Cab. work.....	12	12	10	26 12	1 33	St'm.	No		
350	John Lankheet.....	" "	Baked goods.....	3	3	10	26 12	1 93	None	"		

* Running day and night.

* Running over 10 hours per day.

Inspection Book No. 8.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. I for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
351	Grand Rapids Laundry.....	Muskegon..	Laundry.....	4	4	10	26	12	\$1 25	St'm.	No
352	Langeland Manufacturing Co.....	"	Finish, etc.....	80	80	10	26	12	1 25	"	Yes
353	P. M. R. R. shops.....	"	Repairs.....	200	200	9 ¹	26	12	1 75	"	No
354	Frank Alberts & Co.....	"	Lumber, etc.....	75	75	10	26	8	1 24	"	"
355	Muskegon Milling Co.....	"	Flour, etc.....	15	15	11	26	12	2 00	"	"
356	W. R. Jones.....	"	Lumber.....	30	30	10	26	10	1 60	"	"
357	Palmer & Knowles.....	"	Finish.....	5	5	10	26	12	1 58	"	"
358	Muskegon Electric Light Co.....	"	Electricity.....	11	11	24	30	12	2 02	"	"
359	E. H. Stafford Desk Co.....	"	Furniture.....	150	140	10	26	12	1 07	"	Yes
360	Muskegon Gas Light Co.....	"	Gas, etc.....	5	5	24	30	12	2 10	"	No
361	J. J. Howden Co.....	"	Plumbing.....	8	8	10	26	12	2 00	Rent.	....
362	Rogers Iron Manufacturing Co.....	"	Machinery.....	50	49	10	26	12	2 04	St'm.	No
363	Muskegon Electro-Plating Co.....	"	Electro-plat'g.....	3	2	10	26	12	2 75	Elec.	....
364	Chicago Bakery.....	"	Baked goods.....	3	3	10	26	12	1 00	None	....
365	D. Christie.....	"	".....	6	6	10	26	12	1 66	"	....
366	Muskegon Steam Dye Works.....	"	Dyeing.....	5	4	10	26	12	1 56	St'm.	No
367	J. A. Cowan.....	"	Cigars.....	3	2	8	26	12	1 50	None	....
368	W. W. Andrews.....	"	Printing.....	3	3	10	26	12	1 33	Elec.	....
369	A. Cloeting & Co.....	"	Binding.....	3	3	10	26	12	1 33	None	....
370	Muskegon Rag & Metal Co.....	"	Rags, etc.....	15	15	10	26	12	1 20	"	....
371	Peoples' Steam Laundry.....	"	Laundry.....	17	16	10	26	12	88	St'm.	No
372	Snyder & Thayer.....	"	Candy.....	25	16	10	26	12	1 02	None	....
373	Francis Jiroch.....	"	Cigars.....	20	20	8	26	12	1 50	"	....
374	Morning News.....	"	Newsp'rs, etc.....	12	11	10	26	12	1 73	Elec.	....
375	Vanderlaan & Scott.....	"	Cigars.....	10	9	8	26	12	1 54	None	....
376	Peoples' Steam Laundry.....	"	Laundry.....	16	13	10	26	12	92	St'm.	Yes
377	Thayer Lumber Co., Mill 1.....	"	Lumber.....	140	140	10	26	12	1 96	"	"
378	Thayer Lumber Co., Mill 2.....	"	".....	87	87	10	26	12	1 62	"	"
379	Amazon Knitting Co.....	"	Gloves, etc.....	900	723	10	26	12	83	"	No
380	Shaw-Walker Co.....	"	Printing.....	40	40	10	26	12	95	Elec.	....
381	Barcus Bros.....	"	Saws.....	7	7	10	26	12	2 57	St'm.	Yes
382	Muskegon Steam Laundry.....	"	Laundry.....	13	11	10	26	12	91	"	No
383	Lakeside Iron Works.....	"	Machinery.....	17	17	10	26	12	1 76	S & E	....
384	F. M. Averill.....	"	Cigars.....	6	6	8	26	12	1 62	None	....
385	Champion Iron & Steel Co.....	"	Iron, etc.....	600	502	24	26	12	1 99	St'm.	Yes
386	Central Paper Co.....	"	Paper.....	135	135	24	26	12	1 67	"	"
387	Chase-Hackley Piano Co.....	"	Pianos.....	125	110	10	26	12	1 76	"	No
388	J. Loescher Tannery Co.....	"	Leather.....	40	35	10	26	12	1 78	"	Yes
389	Crescent Manufacturing Co.....	"	Keg stock.....	150	100	10	26	12	1 44	"	No
390	Muskegon Brewing Co.....	"	Beer.....	30	30	10	26	12	2 13	"	Yes
391	McGraft Lumber Co.....	"	Finish.....	55	55	10	26	12	1 40	"	"
392	The Cutting-Kaestner Co.....	"	Leather.....	55	55	10	26	12	1 20	Gas.	....
393	Champion Iron & Steel Co.....	"	Tin plate.....	370	320	24	26	12	1 98	St'm.	Yes
394	J. E. Sitrong.....	"	Shingles.....	46	1	"	"	"	"	"	"
395	W. G. Watson & Co.....	"	Boxes.....	27	"	"	"	"	"	"	"
396	Muskegon Railway Co.....	"	Repairs.....	5	5	10	26	12	1 80	St'm.	No
397	Stewart-Hartshorn Co.....	"	Rollers.....	260	260	10	26	12	1 15	"	"
398	National Biscuit Co.....	"	Crackers.....	27	1	"	"	"	"	"	"
399	L. H. Fink.....	"	Cigars.....	10	10	8	26	12	1 80	None	....
400	S. S. Watson & Co.....	"	Excelsior.....	8	1	"	"	"	"	"	"

a Running over 10 hours per day.
 o Running 7 days per week.
 * Running day and night.

Inspection Book No. 9.

Inspection District No. 8.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
401	Chas. A. Crandall.....	Muskegon..	Finish.....	2	2	10	26	12	\$1 75	Elec. ....	....
402	Muskegon Knitting Mills.....	" "	Underwear...	25	15	10	26	12	93	St'm.	Yes
403	Muskegon Boiler Works.....	" "	Boilers.....	20	20	10	26	12	1 35	"	No
404	United Hame Co.....	" "	Hame woods.	24	1	...	...	...	...	...	...
405	Muskegon Bottling Works.....	" "	Bottle beer...	3	3	10	26	12	1 58	St'm.	No
406	E. Simmons.....	" "	Cigars.....	2	2	8	26	12	1 37	None	....
407	Muskegon Chronicle.....	" "	Newsp'rs, etc.	21	21	10	26	12	1 71	Elec.	....
408	Peter Jungen.....	" "	Cigars.....	3	3	8	26	12	1 67	None	....
409	John Dammings.....	" "	"	3	3	8	26	12	1 58	"	....
410	R. Loth.....	" "	"	2	2	8	26	12	1 50	"	....
411	E. J. & C. A. Neal.....	North Muskegon	Wood.....	10	10	10	26	10	1 50	St'm.	No
412	Langeland Manufacturing Co.....	" "	Lumber.....	25	25	10	26	12	1 32	"	Yes
413	Gow & Campbell.....	" "	"	46	46	10	26	8	1 50	"	No
414	G. H. Elec. Lt. & Water Co.....	Gd. Haven.	Electricity...	4	4	a24	30	12	1 94	"	"
415	Am. Mirror & Glass Bev. Co.....	" "	Mirrors.....	25	1	...	...	...	...	...	...
416	Grand Haven Gas Co.....	" "	Gas.....	2	2	10	26	12	1 87	None	....
417	Grand Haven Steam Laundry....	" "	Laundry.....	10	7	10	26	12	67	St'm.	No
418	White Laundry.....	" "	"	10	7	10	26	12	70	"	....
419	C. Ver Berkmoes.....	" "	Cigars.....	3	3	8	26	12	1 50	None	....
420	Charles Seligman.....	" "	"	3	3	8	26	12	1 58	"	....
421	Joseph Koeltz.....	" "	"	4	3	8	26	12	1 60	"	....
422	American Brass Novelty Co.....	" "	Novelties....	60	34	10	26	12	1 88	St'm.	No
423	Silas Kilbourn & Co.....	" "	Woodenware.	125	120	10	26	12	...	"	Yes
424	Bliss Furniture Co.....	" "	Furniture....	40	30	8	26	12	1 10	"	No
425	Dake Engine Co.....	" "	Engines.....	20	12	10	26	12	1 75	"	"
426	Challenge Corn Planter Co.....	" "	Planters, etc.	180	140	10	26	12	1 10	"	"
427	Grand Haven Basket Co.....	" "	Fruit pkgs....	130	130	10	26	12	77	"	"
428	Grand Haven Leather Co.....	" "	Leather.....	70	30	10	26	12	1 43	"	"
429	Grand Haven Water Co.....	" "	Water.....	4	4	a24	30	12	1 88	"	"
430	P. Dornbos.....	" "	Cigars.....	5	4	8	26	12	1 42	None	....
431	Star Bakery.....	" "	Baked goods.	4	4	10	26	12	1 50	"	....
432	Spring Lake Iron Co.....	Fruitport...	Pig iron.....	65	65	a24	30	12	1 31	St'm.	No
433	Johnston Bros.....	Ferrysburg.	Boilers.....	75	75	10	26	12	1 11	"	"
434	Cappon & Bertsch Leather Co....	Holland....	Leather.....	214	214	10	26	12	1 75	"	Yes
435	Cappon & Bertsch Leather Co....	" "	"	50	50	10	26	12	1 70	"	"
436	Buss Machine Co.....	" "	Machinery....	35	30	10	26	12	1 37	"	No
437	West Michigan Furniture Co.....	" "	Furniture....	126	126	10	26	12	1 22	"	"
438	West Michigan Furn. Co., No. 2.	" "	"	250	235	10	26	12	1 22	"	"
439	C. L. King & Co.....	" "	Fruit pkgs....	167	167	10	26	12	83	"	"
440	Bay View Furniture Co.....	" "	Furniture....	40	40	10	26	12	1 50	"	"
441	H. J. Heinz Co.....	" "	Pickles, etc.	61	61	10	26	4	1 25	"	Yes
442	H. Van Tongeren.....	" "	Cigars.....	20	14	9	26	12	71	None	....
443	Holland Furniture Co.....	" "	Furniture....	150	130	10	26	12	1 54	St'm.	No
444	Walsh-DeRoo Milling Co.....	" "	Flour, etc....	25	25	a15	26	12	1 92	"	"
445	K. Zuidewind.....	" "	Barrels.....	5	4	9	26	12	1 40	None	....
446	A. Van Putten.....	" "	Butter tubs..	25	23	9	26	9	70	St'm.	No
447	Alfred Huntley.....	" "	Machinery....	10	4	10	26	12	2 50	"	"
448	De Grondwet.....	" "	Newsp'rs, etc.	8	8	10	26	12	1 37	Elec.	....
449	De Wachter.....	" "	"	3	3	10	26	12	1 33	None	....
450	O. R. J. Cigar Co.....	" "	Cigars.....	8	8	9	26	12	94	"	....

a Running night and day.

e Not given.

o Running 7 days per week.

u Running over 10 hours per day.

Inspection Book No. 10.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employes when running full capacity.	Number of employes at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
451	Ottawa Furniture Co.....	Holland....	Furniture....	160	156	10	26	12	\$1 17	St'm.	Yes
452	Holland City Steam Laundry....	"	Laundry....	18	18	10	26	12	67	St'm.	No
453	Michigan Toy & Novelty Co.....	"	Novelties....	15	15	10	26	12	1 00	"	"
454	Ottawa County Times.....	"	Newsp'rs, etc.	4	4	10	26	12	1 56	Elec.	"
455	Holland City News.....	"	"	8	8	10	26	12	1 50	"	"
456	Albert Vegter.....	"	Cigars....	2	2	8	26	12	1 21	None	"
457	Scott-Lugers Lumber Co.....	"	Lumber, etc..	25	25	10	26	12	1 60	St'm.	No
458	P. H. Wilms.....	"	Implements..	4	4	10	26	12	1 31	"	"
459	Holland & Lake Michigan Ry. Co	"	Repairs.....	6	6	24	30	12	1 67	"	Yes
460	C. J. Locker & Co.....	"	Butter.....	6	6	10	26	12	1 50	"	No
461	Holland City Elec. Lt. & Water Co	"	Water.....	8	8	24	30	12	1 81	"	"
462	J. R. Kleyn Estate.....	"	Sash, etc....	20	18	9	26	12	1 50	"	"
463	Holland City Mills.....	"	Flour, etc....	7	7	9	26	12	1 29	"	"
464	Reet Sugar Co.....	"	Sugar.....	150	130	24	30	2	2 19	"	Yes
465	Daily Sentinel.....	"	Newspapers..	7	7	10	26	12	79	Elec.	"
466	Zeeland Furniture Co.....	Zeeland....	Furniture....	100	95	10	26	12	1 08	St'm.	No
467	William Wickers.....	"	Wagons, etc.	8	8	10	26	12	1 38	"	"
468	Elenbaas Bros.....	"	Bldg. mater'l	8	8	10	26	12	1 12	"	"
469	H. Van Enenaam & Bro.....	"	Cigars.....	12	12	9	26	12	1 00	None	"
470	Little Wonder Mills.....	"	Flour, etc....	4	4	14	26	12	1 75	St'm.	No
471	C. De Jong.....	"	Bldg. mater'l	5	4	10	26	12	1 25	"	"
472	Zeeland Milling Co.....	"	Flour, etc....	8	8	11	26	12	2 00	"	"
473	Zeeland Brick Co.....	"	Brick, etc....	35	35	10	26	6	99	"	"
474	Shelby Milling Co.....	Shelby....	Flour, etc....	4	4	11	26	12	1 50	"	"
475	Fruit Growers' Package Co.....	"	Fruit pkgs...	35	30	10	26	6	1 10	"	"
476	Shelby Basket Co.....	"	"	30	30	10	26	5	1 67	"	"
477	Getty & Moser.....	"	Lumber.....	12	12	10	26	6	1 27	"	"
478	Montague Iron Works.....	Montague..	Machinery....	50	30	10	26	12	1 50	"	"
479	Montague Roller Mills.....	"	Flour, etc....	4	1	"	"	"	"	"	"
480	L. T. Covell.....	Whitehall..	Lumber.....	70	70	10	26	6	1 43	"	"
481	Erickson, Steffee & Co.....	"	Bldg. mater'l	12	12	10	26	12	1 75	"	"
482	Whitehall Milling Co.....	"	Flour, etc....	5	5	10	26	12	1 50	"	"
483	The Nufer Cedar Co., Covell Mill	"	Shingles.....	30	30	10	26	11	2 20	"	"
484	Whitehall Water Works Co.....	"	Water.....	3	3	24	30	12	1 63	"	"
485	Whitehall Box Co.....	"	Boxes.....	44	44	10	26	11	1 36	Rent.	"
486	Nufer Cedar Co.....	"	Shingles.....	60	60	20	26	11	2 22	St'm.	No
487	Eagle Tanning Co.....	"	Leather.....	125	100	10	26	12	1 44	"	"
488	Sibley & Co.....	"	Decoy ducks.	6	1	"	"	"	"	"	"
489	J. K. Flood.....	Hart.....	Lumber.....	12	12	10	26	7	1 83	St'm.	No
490	W. C. Bennett & Co.....	"	Bldg. mater'l	12	12	10	26	12	1 58	"	"
491	T. R. Brooks & Co.....	"	Laundry.....	3	3	10	26	12	1 00	"	"
492	Henry Kennedy.....	"	Lumber.....	10	1	"	"	"	"	"	"
493	Seager Bros.' Co.....	"	Canned goods	100	"	"	"	"	"	"	"
494	J. K. Flood.....	"	Shingles.....	25	9	10	26	7	1 66	"	"
495	Halstead Table Co.....	Pentwater..	Tables, etc..	6	1	"	"	"	"	"	"
496	Peter Labonta.....	"	Woodwork....	4	4	10	26	12	1 44	"	"
497	J. S. Bird.....	"	Dressed lum.	3	2	10	26	12	1 50	"	"
498	Sands & Maxwell Lumber Co.....	"	Lumber.....	40	40	10	26	6	1 35	"	"
499	Powers & Archer.....	Ferry.....	"	8	6	10	26	7	1 37	"	"
500	Thayer & Son.....	"	"	12	12	10	26	6	1 42	"	"

* Running day and night.
 ° Running 7 days per week.
 u Running over 10 hours per day.

Inspection Book No. 11.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
501	G. K. Platt & Son	Ferry	Lumber.....	25	24	10	26	7	\$1 25	St'm.	No	
502	Thos. H. Pittinger.....	"	"	8	8	10	26	6	1 37	"	"	
503	H. A. Brown.....	Fremont	Flour, etc....	3	3	10	26	12	1 50	"	"	
504	D. Gerbers' Sons	"	Leather.....	35	33	10	26	12	1 33	"	"	
505	K. Mulder	"	Lumber.....	10	1	.....	.....	.....	.....	"	"
506	Burns & Son.....	"	Dressed lum..	4	4	10	26	12	1 50	"	"	
507	Darling Milling Co.....	"	Flour, etc....	5	5	10	26	12	1 56	"	"	
508	Belding Steam Laundry	Belding	Laundry.....	4	4	10	26	12	1 12	"	"	
509	" Granite & Marble W'ks.	"	Monuments...	5	3	10	26	12	1 83	None	.....
510	Richardson Silk Co.....	"	Braids, etc....	300	300	10	26	12	83	St'm.	Yes	
511	Wilson, Dimmick & Sinclair	"	Dressed lum..	12	9	10	26	12	1 39	Rent.	.....
512	E. Chapple.....	"	Flour, etc....	4	4	10	26	12	1 44	W'r	.....
513	G. R. Paper Box Co.....	"	Boxes	25	23	10	26	12	91	None	.....
514	Ballou Basket Works.....	"	Baskets, etc..	51	51	10	26	12	1 47	St'm.	Yes	
515	Belding-Hall Mfg. Co., Factory C.	"	Refrigerators	95	95	10	26	12	1 33	"	"	
516	Belding Bros. & Co.....	"	Cloth, etc....	450	350	10	26	12	93	"	"	
517	Belding-Hall Mfg. Co., Factory B.	"	Refrig., etc..	80	80	10	26	12	1 23	"	"	
518	" " " " " D.	"	Lumber.....	30	30	10	26	7	1 30	"	No	
519	" " " " " A.	"	Refrigerators	170	170	10	26	12	1 20	"	Yes	
520	Belding Shoe Co.....	"	Shoes.....	50	40	10	26	12	82	"	"	
521	Portland Milling Co.....	Portland ..	Flour, etc....	18	18	a 24	26	12	1 80	S&W	No	
522	"	"	Barrels	12	12	10	26	12	1 67	None	.....
523	Dillenbaugh-Alton Mfg. Co.....	"	Novelties....	60	50	10	26	12	94	St'm.	No	
524	"	"	Lumber.....	10	1	.....	.....	.....	.....	"	"
525	Wolverine Soap Co.....	"	Soap	4	4	10	26	12	2 37	St'm.	No	
526	Portland Basket Co.....	"	Baskets	6	1	.....	.....	.....	.....	"	"
527	" City Laundry.....	"	Laundry.....	3	3	10	26	12	1 50	None	.....
528	" Furniture Co.....	"	Furniture....	40	40	10	26	11	1 02	St'm.	No	
529	" Manufacturing Co.....	"	Wash. mach..	15	15	10	26	12	1 33	W'r	.....
530	O. E. Robinson	"	Barrels	5	5	10	26	12	1 40	None	.....
531	Portland Creamery & Cheese Fac.	"	Butter, etc....	3	3	7	26	12	1 00	St'm.	No	
532	Bandfield Furniture Co.....	"	Tables,	6	6	10	26	12	1 33	S&W	"	
533	Wm. Bates.....	"	Castings.....	6	4	10	26	9	1 50	St'm.	"	
534	Superior Mills.....	Lowell.....	Flour	6	6	a 24	26	12	1 33	W'r	.....
535	Forrest Mills	"	Feed	3	3	a 12	26	12	1 50	"	"	
536	Lowell Steam Laundry.....	"	Laundry.....	4	4	10	26	12	1 00	St'm.	No	
537	Frank R. Ecker.....	"	Dressed lum..	7	7	10	26	12	1 22	"	Yes	
538	Lowell Cutter Works.....	"	Cutters	90	90	10	26	12	1 28	"	No	
539	Joseph Hamilton.....	"	Monuments...	5	4	10	26	12	2 00	None	.....
540	Mack & Pettitt.....	"	Cigars	3	3	8	26	12	1 33	"	"	
541	C. & L. Kelly.....	Saranac	Lumber.....	8	1	.....	.....	.....	.....	St'm.	No	
542	D. G. Huhn.....	"	Flour, etc....	5	3	10	26	12	1 41	S&W	"	
543	Peter Scheidt.....	"	Wagons, etc..	4	3	10	26	12	1 50	St'm.	"	
544	Chas. H. Rece	"	Feed	3	3	10	26	12	1 25	"	"	
545	Saranac Dairy Co.....	"	Butter	2	2	8	26	12	1 37	"	"	
546	Novelty Mills.....	Ionis	Flour, etc....	7	7	10	26	12	1 75	"	"	
547	Edward Wallerstein & Co.....	"	Shirts	255	255	10	26	12	52	"	"	
548	F. H. Vander Heyden.....	"	Brick	25	22	10	26	6	1 31	"	"	
549	Valley Creamery.....	"	Butter	4	4	10	26	9	1 25	"	"	
550	Greenup & Mead.....	"	Lumber.....	20	1	.....	.....	.....	.....	"	"

a Running day and night.
 u Running over 10 hours per day.

Inspection Book No. 12.

Inspection District No. 8.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. I for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
551	R. Hearsey.....	Ionia.....	Finish.....	3	3	10	26	12	\$1 50	St'm.	No
552	G. R. Paper Box Co.....	".....	Boxes.....	20	15	10	26	12	73	E & S	"
553	Ionia Wagon Co.....	".....	Wagons, etc.	160	100	10	26	12	1 40	St'm.	"
554	Michigan Clothing Co.....	".....	Clothing.....	125	85	10	26	12	1 18	E & S	"
555	S. E. Waters.....	".....	Machinery.....	3	3	10	26	12	1 33	St'm.	"
556	Dixon's Laundry.....	".....	Laundry.....	5	4	10	26	12	1 25	"	"
557	Ionia City Steam Laundry.....	".....	".....	14	12	10	26	12	1 17	"	"
558	E. Wallerstein & Co.....	Ionia Refry	State instit'n.	330	330	9	26	12	.....	Rent.	....
559	Imperial Knitting Co.....	".....	".....	57	57	9	26	12	.....	"	....
560	Ionia Pottery Co.....	".....	Flower pots..	13	12	10	26	12	1 25	St'm.	No
561	Ionia Gas & Coke Co.....	".....	Gas, etc.....	7	7	8	30	12	1 50	"	"
562	Anderson Monumental Works...	".....	Monuments..	8	8	9	26	12	2 00	Gas.	....
563	G. F. Faude.....	".....	Cigars.....	25	18	10	26	12	1 40	None	....
564	L. H. Geck.....	".....	".....	6	6	8	26	12	1 92	"	....
565	Ionia Sentinel.....	".....	Newsp'rs, etc.	8	8	10	26	12	1 25	St'm.	No
566	Ionia Standard.....	".....	".....	6	6	10	26	12	1 08	W'tr	....
567	Schild Fence Co.....	".....	Fence.....	3	2	10	26	12	1 25	Rent.	....
568	W. C. Page & Co.....	".....	Feed, etc.....	7	7	10	26	12	1 32	St'm.	No
569	Crookshank, Somers & Co.....	".....	Finish.....	15	7	10	26	12	1 78	"	....
570	Pere Marquette Repair Shops...	".....	Repairs.....	240	240	10	26	12	1 89	"	"
571	R. L. Burger.....	".....	Cigars.....	3	3	10	26	12	1 17	None	....
572	Ionia Brewing Co.....	".....	Beer.....	6	6	10	26	12	2 17	St'm.	Yes
573	Ovid Roller Mills.....	Ovid.....	Flour, etc.....	4	4	11	26	12	1 25	"	No
574	S. W. Gardiner.....	".....	Lumber.....	5	1	.....	.....	.....	.....	"	....
575	Ovid Carriage Co.....	".....	Carriages.....	85	60	10	26	12	1 39	"	"
576	Ovid Steam Laundry.....	".....	Laundry.....	5	5	10	26	12	95	"	"
577	Maple River Creamery.....	".....	Butter.....	6	6	8	26	12	1 49	"	"
578	Wood Bros.....	St. Johns..	Flour, etc.....	3	3	10	26	12	1 33	"	"
579	St. Johns Spring Co.....	".....	Implements..	25	25	10	26	12	1 32	"	"
580	St. Johns Table Co.....	".....	Tables, etc..	250	201	10	26	9	1 24	"	Yes
581	J. S. Osgood.....	".....	Beans.....	12	1	.....	.....	.....	.....	"	No
582	St. Johns Iron Works.....	".....	Machinery.....	6	6	10	26	12	2 00	"	"
583	D. M. Shaw & Son.....	".....	Finish.....	3	3	10	26	12	1 25	"	"
584	Richmond Bros.....	".....	Machinery.....	5	5	10	26	12	1 40	Gas.	....
585	J. D. Henderson & Bro.....	".....	Flour, etc.....	3	3	10	26	12	1 25	St'm.	No
586	A. T. Smith.....	".....	Carriages, etc.	10	8	10	26	12	1 34	"	"
587	Walters & Hodge.....	".....	Monuments..	6	5	10	26	12	2 40	"	"
588	F. F. Murdock.....	".....	".....	7	7	10	26	12	2 00	None	....
589	St. Johns Republican.....	".....	Newsp'rs, etc.	8	8	10	26	12	1 00	Elec.	....
590	Bush's Steam Laundry.....	".....	Laundry.....	5	5	10	26	12	1 20	St'm.	No
591	St. Johns News.....	".....	Newsp'rs, etc.	7	7	10	26	12	1 00	Gas.	....
592	Columbian Mfg. Co.....	".....	Comfortables	18	18	10	26	12	72	"	....
593	St. Johns Elec. L't & Water Wks	".....	Electricity...	7	7	24	30	12	1 61	St'm.	Yes
594	Herrick Casket Co.....	Lyons.....	Caskets.....	10	8	10	26	12	1 25	W'tr	....
595	Beach Mfg. Co.....	".....	Plow points..	13	10	10	26	12	1 15	"	....
596	Muir Washing Machine Co.....	Muir.....	Machines.....	12	12	10	26	12	1 16	Gas.	....
597	Sparta Brick & Tiling Co.....	Sparta.....	Brick, etc.....	20	18	10	26	7	1 67	St'm.	Yes
598	Sparta Milling Co.....	".....	Flour.....	1	6	10	26	12	1 17	"	No
599	M. Van Wiltburg.....	".....	Lumber, etc..	5	5	10	26	7	1 20	"	"
600	Weich Folding Bed Co.....	".....	Beds.....	125	125	10	26	12	1 23	"	"

o Running 7 days per week.

u Running over 10 hours per day.

x Of these 290 are convicts.

a Running day and night.

Inspection Book No. 13.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is in good condition?
601	Welch Folding Bed Co.....	Sparta.....	Lumber.....	20	1	.....	.....	.....	.....	St'm.	No
602	R. J. Side.....	Kent City..	Dressed lum.	10	7	10	26	9	\$1 29	"	"
603	C. H. Whitney.....	"	Flour, etc.....	8	8	8	26	12	1 25	"	"
604	A. H. Armitage.....	Casnovia..	"	8	3	10	26	12	1 25	"	"
605	Emanuel King.....	Lisbon.....	Fruit pkgs.....	12	12	10	26	7	1 33	"	"
606	Hemily & Kennicotte.....	Newaygo...	Bldg. materi'l	8	8	10	26	12	1 38	Gas.....	.....
607	J. M. Seymour.....	"	Lath.....	10	1	.....	.....	.....	.....	St'm.	No
608	Newaygo Mills.....	"	Flour, etc.....	5	5	10	26	12	1 60	S & W	"
609	Childsdale Straw Board Co.	Childsdale.	Straw board.....	25	1	.....	.....	.....	.....	St'm.	Yes
610	Ludington Novelty Co.....	Ludington..	Veneer.....	25	15	10	26	12	1 80	St'm.	Yes
611	" " ".....	"	Games, etc.....	75	75	10	26	12	1 25	"	"
612	Cartier Enamelling Co.....	"	Enameling.....	65	41	10	26	12	1 22	"	No
613	" Lumber Co.....	"	Lumber, etc.....	85	85	10	26	8	1 65	"	"
614	Anchor Salt Block, Plant B.	"	Salt.....	11	11	a 20	26	8	1 52	Rent.....	.....
615	Ludington Milling Co.....	"	Flour, etc.....	5	5	u 12	26	12	1 70	St'm.	No
616	" Electric Lt. & P. Co..	"	Electricity.....	4	4	a 24	o 30	12	2 19	"	"
617	Pierce Manufacturing Co.....	"	Brooms.....	15	15	10	26	12	1 13	None	.....
618	Monroe A. Agens.....	"	Handles, etc.....	10	10	10	26	12	1 35	St'm.	No
619	Davies Bros.....	"	Boilers.....	6	5	10	26	12	2 20	"	"
620	M. Mussler.....	"	Cigars.....	3	3	8	26	12	1 75	None	.....
621	Pere Marquette Canning Co.	"	Can fruit.....	300	300	10	26	4	75	St'm.	No
622	Anchor Salt Co., Block A.	"	Salt.....	35	35	a 24	26	12	1 46	"	Yes
623	National Salt Co.....	"	"	47	47	10	26	12	1 61	"	No
624	J. S. Stearns.....	"	"	79	79	a 24	26	12	1 81	"	Yes
625	"	"	Lumber.....	186	186	10	26	12	1 54	"	"
626	" " ".....	"	Shingles.....	17	17	10	26	12	1 81	"	"
627	" " ".....	"	Barrels.....	21	21	10	26	12	1 81	"	"
628	" " ".....	"	Dressed lum.	13	13	10	26	12	1 46	"	"
629	" " ".....	"	Staves.....	35	35	10	26	12	1 43	"	"
630	Phoenix Basket Co.....	"	Fruit pkgs.....	120	120	10	26	8	82	"	No
631	Ludington Woodenware Co.....	"	Woodenware.....	45	1	.....	.....	.....	.....	"	"
632	Star Steam Laundry.....	"	Laundry.....	8	8	10	26	12	87	"	"
633	Lubetsky Bros.....	"	Cigars.....	5	4	8	26	12	1 44	None	.....
634	American Steam Laundry.....	"	Laundry.....	5	5	10	26	12	95	St'm.	No
635	Industrial Iron Works.....	"	Machinery.....	8	8	10	26	12	1 25	"	"
636	Record.....	"	Newsp'r's, etc.	6	6	10	26	12	1 33	"	"
637	Ludington Appeal.....	"	"	7	7	10	26	12	1 51	W'tr	.....
638	M. & O. R. R.....	Buttersville	Repairs.....	12	12	10	26	12	2 04	St'm.	No
639	Butters & Peters Salt & Lum. Co.	"	Lumber, etc.....	80	80	a 20	26	8	1 49	"	"
640	" " " " " " " " " " " "	"	Salt.....	30	30	a 20	26	8	1 77	"	"
641	" " " " " " " " " " " "	"	Barrels.....	30	30	10	26	8	1 43	"	"
642	Custer Manufacturing Co.....	Custer.....	Clothes pins.	35	35	10	26	12	1 21	"	"
643	Foralind & Young.....	"	Flour, etc.....	5	4	10	26	12	1 44	"	"
644	Young & Christensen.....	Scottville..	"	5	5	10	26	12	1 56	"	"
645	Union Lumber & Salt Co.....	Stronach....	Salt.....	45	45	a 20	26	11	1 74	"	"
646	" " " " " " " " " " " "	"	Dressed lum.	15	7	10	26	12	1 78	Rent.....	.....
647	" " " " " " " " " " " "	"	Barrels.....	22	22	10	26	11	1 32	"	"
648	" " " " " " " " " " " "	"	Lumber.....	121	121	10	26	11	1 58	St'm.	Yes
649	McKillop & Hopper.....	"	" etc.....	40	40	10	26	12	1 72	"	No
650	Filer & Sons.....	Filer City..	"	65	65	10	26	8	1 50	"	Yes

* Running day and night.

- Running 7 days per week.

^u Running over 10 hours per day.

Inspection Book No. 14.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	if steam is there low water alarm, and is it in good condition?
651	Flier & Sons.....	Flier City..	Salt.....	22	22	a24	26	9	\$1 80	Rent.....		
652	" ".....	" ".....	Staves.....	18	18	10	26	8	1 25	".....		
653	" ".....	" ".....	Shingles.....	33	33	10	26	8	1 37	".....		
654	" ".....	" ".....	Barrels.....	16	16	10	26	9	1 25	".....		
655	Canfield Salt & Lumber Co.....	East Lake..	Lumber.....	110	110	10	26	8	1 64	St'm.	No	
656	" " " ".....	" ".....	Salt.....	20	20	10	26	8	2 75	Rent.....		
657	" " " ".....	" ".....	Staves, etc.....	25	25	10	26	8	1 22	".....		
658	R. G. Peters Salt & Lumber Co.....	" ".....	Lumber.....	176	173	10	26	9	1 68	St'm.	No	
659	" " " ".....	" ".....	Salt.....	88	88	a20	26	9	1 85	".....		
660	" " " ".....	" ".....	Shingles.....	78	78	10	26	9	1 68	Rent.....		
661	" " " ".....	" ".....	Barrels.....	70	70	10	26	9	1 45	".....		
662	" " " ".....	" ".....	Staves, etc.....	71	71	10	26	9	1 41	".....		
663	" " " ".....	" ".....	Repairs.....	15	14	10	26	12	1 78	".....		
664	Manistee & Luther R. R.....	" ".....	".....	15	15	10	26	12	1 54	".....		
665	Canfield Salt & Lumber Co.....	East Lake Chan'l	Lumber.....	60	60	10	26	8	1 74	St'm.	Yes	
666	" " " ".....	" ".....	Salt.....	26	26	10	26	8	1 71	".....		
667	" " " ".....	" ".....	Staves, etc.....	35	35	10	26	8	1 28	Rent.....		
668	Canfield & Wheeler Co.....	Manistee.....	Salt.....	16	16	a24	26	8	1 96	".....		
669	" " " ".....	" ".....	Lumber, etc.....	108	108	10	26	8	1 74	St'm.	No	
670	" " " ".....	" ".....	Barrels.....	15	15	10	26	9	1 60	Rent.....		
671	Manistee Water Works.....	" ".....	Water.....	7	7	a24	630	12	1 79	St'm.	No	
672	August N. Johnson.....	" ".....	Machinery.....	12	12	10	26	12	2 13	".....		
673	S. C. Overpack.....	" ".....	Wagons, etc.....	10	10	10	26	12	2 25	None.....		
674	Daily Advocate.....	" ".....	Newsp'rs, etc.....	7	7	10	26	12	1 14	Elec.....		
675	E. J. Comfort.....	" ".....	Cigars.....	3	3	8	26	12	1 50	None.....		
676	A. H. Ilse.....	" ".....	".....	3	3	8	26	12	1 67	".....		
677	Manistee Mfg. Co.....	" ".....	Furniture.....	70	68	10	26	12	1 30	St'm.	Yes	
678	C. O. D. Steam Laundry.....	" ".....	Laundry.....	16	16	10	26	12	1 09	".....	No	
679	Max Bauman.....	" ".....	Cigars.....	7	7	8	26	12	1 28	None.....		
680	Daily News Publishing Co.....	" ".....	Newsp'rs, etc.....	14	14	10	26	12	1 29	St'm.	Yes	
681	Wm. Batly & Sons.....	" ".....	Saws.....	3	3	10	26	12	2 33	".....	No	
682	Union Boiler Works.....	" ".....	Boilers.....	9	9	10	26	12	1 55	None.....		
683	Jos. Kirster.....	" ".....	Cigars.....	11	11	8	26	12	1 46	".....		
684	L. W. Farrent.....	" ".....	".....	5	5	8	26	12	1 55	".....		
685	Sands-Rietz Mill.....	" ".....	Lumber.....	86	86	10	26	10	1 06	St'm.	Yes	
686	" " Salt Block.....	" ".....	Salt.....	40	40	10	26	10	1 75	".....		
687	" " Mill.....	" ".....	Barrels.....	25	24	10	22	8	1 39	Rent.....		
688	Louis Sands-Rietz Plant.....	" ".....	Staves.....	16	16	10	26	10	1 38	".....		
689	American Hide & Leather Co.....	" ".....	Leather.....	75	1					".....		
690	Babcock Lumber Co.....	" ".....	Shingles.....	56	56	10	26	8	1 52	St'm.	Yes	
691	Manistee, F. C. & E. L. Ry.....	" ".....	Repairs.....	9	9	10	26	12	1 94	".....		
692	The Buckley & Douglas Lum. Co.....	" ".....	Lumber.....	195	195	a20	26	11	1 62	".....		
693	" " " ".....	" ".....	Salt.....	111	111	a20	26	11	1 75	Rent.....		
694	" " " ".....	" ".....	Shingles.....	54	54	10	26	11	1 51	".....		
695	" " " ".....	" ".....	Staves, etc.....	77	77	a20	26	11	1 14	".....		
696	" " " ".....	" ".....	Barrels.....	67	67	10	26	8	1 40	".....		
697	M. & N. E. R. R. Co.....	" ".....	Repairs.....	30	30	10	26	12	2 20	".....		
698	Louis Sands.....	" ".....	Lumber.....	106	106	10	26	8	1 53	St'm.	Yes	
699	" " " ".....	" ".....	Salt.....	39	39	10	26	8	1 79	Rent.....		
700	" " " ".....	" ".....	Dressed lum.....	6	6	10	18	8	1 57	St'm.	No	

• Running day and night.

• Running seven days per week.

Inspection Book No. 15.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
701	Louis Sands.....	Manistee...	Shingles.....	59	59	10	26	8	\$1 50	St'm.	Yes
702	" ".....	"	Barrels.....	20	20	10	24	8	1 43	Rent.	....
703	" ".....	"	Staves.....	21	21	10	26	8	1 19	"	....
704	Patrick Noud.....	"	Shingles.....	31	31	10	26	8	1 95	St'm.	No
705	Manistee Lumber Co.....	"	Lumber.....	90	74	10	26	8	1 70	"	Yes
706	" " ".....	"	Lath.....	12	12	10	26	8	77	Rent.	....
707	Manistee-Eureka Mill.....	"	Lumber.....	73	73	10	26	8	1 67	St'm.	Yes
708	" " ".....	"	Salt.....	44	44	10	26	8	1 66	Rent.	....
709	" " ".....	"	Barrels.....	15	15	10	26	8	1 61	"	....
710	" " ".....	"	Lath, etc.....	33	33	10	26	8	1 12	"	....
711	City Planing Mills.....	"	Dressed lum.	5	5	10	26	12	1 40	St'm.	No
712	Manistee Emery Wheel Co.....	"	Emery wheels	3	3	10	26	12	1 91	Gas.....	....
713	Manistee Iron Works Co.....	"	Machinery.....	100	52	10	26	12	2 00	St'm.	No
714	Louis Sands Elec. Light Plant.....	"	Electricity.....	18	16	12	0 30	12	1 56	"	"
715	Manistee Fuel & Gas Co.....	"	Gas, etc.....	3	3	10	0 30	12	1 25	"	"
716	C. H. Daniels.....	"	Beer.....	8	8	10	26	12	1 56	"	"
717	J. C. Pomeroy.....	"	Soft drinks.....	8	8	10	26	12	1 31	"	Yes
718	Salt City Iron Works.....	"	Machinery.....	8	8	10	26	12	2 50	"	No
719	Manistee Saw Works.....	"	Saws.....	5	5	10	26	12	2 75	"	"
720	R. J. B. Newcomb.....	"	Finish.....	7	7	10	26	12	1 97	"	Yes
721	City Steam Laundry.....	"	Laundry.....	10	10	10	26	12	1 05	"	No
722	State Lumber Co.....	"	Lumber.....	133	133	10	26	8	1 07	"	Yes
723	" " ".....	"	Barrels.....	22	22	10	20	8	1 15	Rent.	....
724	" " ".....	"	Salt.....	64	64	24	26	8	1 74	"	"
725	" " ".....	"	Shingles.....	32	32	10	20	8	1 86	"	....
726	" " ".....	"	Lath, etc.....	42	42	10	26	8	1 04	"	....
727	Wilcox Bros.....	Cadillac.....	Brick.....	20	20	10	26	4	1 75	St'm.	No
728	" " ".....	"	Lumber.....	18	1	....	....	....	....	....	....
729	Cobbs & Mitchell.....	"	Flooring.....	42	42	10	26	12	1 73	St'm.	Yes
730	" " " Mill No. 1.....	"	Lumber.....	41	41	10	26	10	1 90	"	"
731	" " " No. 2.....	"	".....	70	70	10	26	10	1 87	"	"
732	Murphy & Diggins.....	"	".....	61	61	10	26	10	1 73	"	No
733	Haynes Bros.....	"	Dressed lum.	30	20	12	26	12	1 65	"	"
734	Cadillac City Mills.....	"	Flour, etc.....	5	5	10	26	12	1 95	"	"
735	Terwilliger & Crawford.....	"	Printing.....	3	3	10	26	12	67	"	"
736	Cadillac Steam Laundry.....	"	Laundry.....	12	12	10	26	12	92	"	"
737	Wm. McAdie & Co.....	"	Machinery.....	20	20	10	26	12	1 75	"	"
738	Richmond Rybold.....	"	Cigars.....	15	15	8	26	12	1 33	None	....
739	William Hayes.....	"	Boilers.....	12	12	10	26	12	1 64	Rent.	....
740	Cummer Light & Water Co.....	"	Electricity.....	11	11	24	0 30	12	2 09	St'm.	Yes
741	Cummer & Diggins, Mill No. 1...	"	Lumber.....	35	35	10	26	12	1 75	"	No
742	Blodgett, Cummer & Diggins.....	"	Dressed lum.	68	68	10	26	12	1 51	"	Yes
743	Cummer & Diggins, Mill No. 2...	"	Lumber.....	42	42	10	26	12	1 75	"	No
744	Cadillac Handle Co.....	"	Handles, etc.	55	55	10	26	11	1 78	"	"
745	Cummer Manufacturing Co.....	"	Crates.....	17	17	10	26	12	1 39	"	"
746	C. M. Oviatt Manufacturing Co..	"	Fruit pkgs...	80	35	10	26	10	55	None	....
747	News and Express.....	"	Newsp'r's, etc.	6	6	10	26	12	1 04	Gas.....	....
748	State Democrat.....	"	".....	5	5	10	26	12	1 00	"	....
749	A. Green & Son.....	Manton.....	Dressed lum.	5	5	10	26	9	1 30	St'm.	No
750	Williams Bros.' Co.....	"	Last blocks...	30	30	20	26	12	1 50	"	"

a Running day and night.
 o Running 7 days per week.
 u Running over 10 hours per day.

Inspection Book No. 16.

Inspection District No. 3.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employes when running full capacity.		Number of employes at time of inspection. 1 for idle.		Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
751	Andrew McAfee.....	Manton.....	Staves, etc...	30	30	10	26	12	\$1 40	St'm.	Yes		
752	Williams Bros. Co.....	".....	Lumber.....	5	5	10	26	12	1 50	"	No		
753	Lozie & Reynolds.....	Boon.....	".....	8	8	10	26	6	1 50	"	"		
754	The Chapman-Sargent Co.....	".....	Bowls.....	7	7	10	26	11	1 40	"	"		
755	P. G. Buckle & Co.....	Harrietta.....	Lumber.....	17	1	1	.....	.....	.....	"	"
756	Harrietta Stave Co.....	".....	Staves, etc...	18	18	10	26	7	1 43	"	"		
757	Harrietta Brick Co.....	".....	Brick.....	15	15	10	26	5	1 53	"	"		
758	John Dalton.....	".....	Lumber.....	12	12	10	26	6	1 58	"	"		
759	H. M. Patrick.....	".....	Excelsior.....	15	1	1	.....	.....	.....	"	"
760	Williams Bros. Co.....	Mesick.....	Last blocks..	15	15	20	26	12	1 52	"	Yes		
761	E. A. Mesick.....	".....	Lumber.....	12	12	10	26	5	1 52	"	"		
762	L. J. Tripp.....	".....	Handles, etc.	20	20	10	26	10	1 50	"	No		
763	Burkett Bros.....	Sherman.....	Lumber.....	8	8	10	26	7	1 56	"	"		
764	Adelbert Wheeler.....	".....	".....	8	8	10	26	6	1 53	"	"		
765	W. A. Cook.....	Yuma.....	".....	12	12	10	26	8	1 56	"	"		
766	Southern Chemical Co.....	".....	W'd. alcohol..	20	20	24	30	12	1 60	"	"		
767	Sturtevant & Bunyea.....	Claggettville	Lumber.....	25	25	10	26	8	1 40	"	Yes		
768	M. J. Claggett & Co.....	".....	Staves.....	40	40	10	26	12	1 62	"	"		
769	Streeter Lumber Co.....	Bagnal.....	Lumber.....	20	20	10	26	10	1 50	"	No		
770	F. E. Markham.....	Frankfort.....	Machinery....	3	3	10	26	12	1 58	"	"		
771	J. Courville.....	".....	Dressed lum.	4	4	10	26	12	1 12	"	"		
772	Bellows Bros.....	".....	Lumber.....	33	33	10	26	6	1 36	"	"		
773	D. B. K. Van Raalte.....	".....	".....	15	15	10	26	4	1 52	"	"		
774	Jacobson Bros.....	".....	Dressed lum.	4	4	10	26	12	1 50	Rent.	.....	
775	D. B. Butler.....	".....	Lumber.....	40	40	10	26	8	1 62	St'm.	No		
776	Frankfort Milling Co.....	".....	Flour, etc....	2	2	10	26	12	2 00	"	"		
777	Crane Lumber Co.....	S. Frankfort	Lumber.....	25	25	10	26	12	1 62	"	"		
778	South Side Mfg. Co.....	".....	Flooring.....	40	40	10	26	12	1 27	"	"		
779	Cutler & Thompson.....	Homestead.....	Lumber.....	16	16	10	26	8	1 47	"	Yes		
780	Case Bros.....	Benzonia.....	".....	15	15	10	26	8	1 73	"	"		
781	International Chemical Co.....	Thompsonville.	W'd. alcohol..	6	6	24	30	12	1 58	"	No		
782	Thompsonville Cooperage Co.....	".....	Coopering....	150	100	10	26	12	1 50	"	Yes		
783	Delaney & Hyatt.....	".....	Lumber.....	10	10	10	26	10	1 50	"	No		
784	L. A. Collier.....	".....	Finish.....	3	3	10	26	12	1 50	"	"		
785	Tindall & Jackson.....	Nessen City	Lumber.....	35	35	10	26	8	1 51	"	"		
786	DeArnond, Obermeyer & Co.....	".....	Hame woods..	8	8	10	26	10	1 70	"	"		
787	Copemish Roller Mills.....	Copemish.....	Flour, etc....	5	5	10	26	12	1 30	"	Yes		
788	The Chapman-Sargent Co.....	".....	Woodenware	35	20	10	26	12	1 50	"	"		
789	M. T. Crimmins.....	".....	Lumber, etc..	5	1	.....	.....	.....	.....	"	No	
790	Avery Thomas.....	Honor.....	".....	15	15	10	26	12	1 73	"	"		
791	Guelph Patent Cask Co.....	".....	Casks, etc....	85	85	10	26	12	1 27	"	"		
792	Hopkins & Bundy.....	Bear Lake.....	Lumber.....	50	48	10	26	8	1 89	"	Yes		
793	Henry Starke Land & Lum. Co	".....	" etc.....	45	43	10	26	10	1 51	"	"		
794	E. W. Starr.....	Peacock.....	".....	15	15	10	26	8	1 80	"	No		
795	Michigan Glue Co.....	Grandville.....	Glue.....	12	1	.....	.....	.....	.....	"	"
796	Jennison Mills.....	Jennison.....	Flour, etc....	5	5	10	26	12	1 52	St'm.	No		
797	A. J. Carman.....	Grand Rapids..	Woodwork.....	4	4	10	26	12	1 50	"	"		
798	Newhof & Hoekzema.....	".....	Novelties.....	5	5	10	26	12	1 50	"	"		
799	The Furn. City Glass Bend. Wks.	".....	Glass.....	8	8	10	26	.....	2 00	None	.....	
800	The Mancha Show Case Co.....	".....	Cases.....	20	10	10	26	12	1 50	St'm.	No		

• Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 17.

Inspection District No. 3.—*Concluded.*

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
801	John Hummell	Lake Odessa...	Lumber.....	9	1	.....	.....	.....	.....	St'm.	No
802	Alonzo Heath.....	" "	Dressed lum.	4	4	10	26 12	\$1 50	"	"	"
803	S. H. Kart.....	" "	Flour & feed.	3	3	10	26 12	1 25	"	"	"
804	Fred Townsend.....	" "	Interior finish	3	3	10	26 12	1 42	"	"	"
805	Heaton & Co.....	" "	Flour & feed.	3	3	10	26 12	1 25	"	"	"
806	Verity Manufacturing Co.....	" "	Tables, etc....	32	32	10	26 12	1 02	"	"	"
807	Miller & Hartman.....	" "	Flour & feed.	3	3	10	26 12	1 48	"	"	Yes
808	Geo. W. Sharer.....	Cedar Springs..	Staves, etc....	25	24	10	26 12	1 44	"	"	"
809	J. H. Worden.....	" "	Lumber.....	15	15	10	26 12	1 52	"	"	No
810	G. R. Preserving Co.....	Grand Rapids..	Fruits	16	3	10	26 12	1 37	None	.....	.....
811	G. R. Felt Boot Co.....	" "	Rubber boots, etc.	250	83	10	26 12	2 00	St'm.	Yes	.....
812	Foster & Winchester Lumber Co.	" "	Lumber.....	78	78	10	26 12	1 39	"	"	No

DEDUCTIONS FROM WORK IN THIRD DISTRICT.

There were 812 factories inspected, as against 746 in 1899. Of these 772, or 95 per cent, were running at the time of inspection, only 40 being found idle. Those running were averaging 10.7 hours per day, a slight increase over 1899. Many factories were operated both day and night. They were averaging 25.9 days per month and 11.3 months per year.

At full capacity they would employ 36,643 persons, an average for each factory of 46.4 employees. At the time of inspection they were employing 28,975 males and 4,216 females, a total of 33,191, which is an average for each factory of 43.8, or an average less full capacity of 2.6 each. The females were employed in 243 factories, an average of 17.3 for each factory. The percentage of employees in each factory has slightly increased over 1899. Of these factories, 160 were employing children between the ages of 14 and 16 years, the children so employed numbering 734, an average of 4.6 for each factory employing children.

More factories were employing children of that age, but the per cent of children employed was less than in 1899.

Very few children under 14 years of age were found employed and their immediate discharge was ordered.

The average daily pay roll of the 772 factories which were running aggregated \$46,326.68, an average for each factory of \$60.01, or an average for each employe of \$1.38. This daily wage average is for all classes

of employes and shows an increase over 1899 of nine cents per day for each employe.

The factories inspected have been in operation an average of 12.1 years each, but 248, or over 30 per cent of them, have been established since 1895, the largest number, 59, being in 1899. The present year shows a large per cent of new factories put in operation. The great manufacturing center of Grand Rapids is in this district.

Of the 772 factories running, 596, or 77 per cent, report that business has increased in the past year; 433, or 56 per cent, have invested more capital, and 515, or 67 per cent, are employing more laborers. The present outlook is even better than was reported in 1899.

The motive power used for operating these factories is an important item, as 84 per cent are factories using some kind of power. Of these, 460, or about 60 per cent, use steam, and in addition to this 65 rent their power, which is presumably steam, 86 use electric power, 22 use gasoline engines, and 14 use water power. Electricity and gasoline engines are increasing forces in the question of motive power.

Of the 460 factories using steam boilers, 121 were supplied with low water alarms, 11 of these not being in good working condition. This necessitated orders in 350 factories for the equipment of their boilers with proper low water alarm devices. The alarms in use cover nine devices: The Reliance, the Kirchner, the Lowe and the Sims being the leading ones. The next inspection will show many other reliable patents.

Orders for changes were made in 495 factories, of which 368 were connected with low water alarms for boilers. There were only 127 factories where changes were ordered aside from these alarms. All steam boilers are being rapidly equipped with safe devices.

The accidents reported in the district were only 21, as compared with 66 in 1899. These accidents occurred in 17 factories and were classified as six fatal, three serious, nine severe and three slight. See table of accidents and deductions therefrom on pages following.

CHANGES ORDERED DURING YEAR.

DISTRICT NO. 3.

[The number refers to factory number in table.]

- 4.—Setscrews in engine room guarded, and low water alarm for boiler.
- 16.—Sworn statements for all children employed.
- 17.—Shafting made more secure.
- 24.—Automatic gates on elevator put in order and landings of fire escapes cleared.
- 33.—Sworn statement for one boy employed.
- 34.—Sworn statement for one boy employed.
- 47.—Separate closet for females and stairs screened.
- 55.—Sworn statements for all children employed.
- 58.—Setscrews on shafting and sticker on first floor guarded.
- 59.—Automatic gates for elevator openings.
- 61.—Blower system repaired.

- 65.—Windows to fire escape to open with balancing weights on all floors.
- 66.—Drive wheel protected; alarm on boiler, and belts on first floor and belt running through first floor guarded.
- 67.—Sworn statements for all children employed; automatic gates on elevator openings in old part.
- 68.—Blower system extended to sticker.
- 69.—Blower on planer repaired.
- 72.—Setscrews for shafting guarded.
- 76.—Alarm on boiler repaired.
- 77.—Alarm on boiler repaired.
- 88.—Sworn statements for all children employed.
- 110.—Alarm on boiler repaired.
- 113.—Blower system repaired and put in working order.
- 117.—Separate closet for females and shaft line of sewing machine guarded.
- 118.—Closet for males repaired.
- 119.—Shafting of sewing machines by operators' feet guarded.
- 125.—Drop ladder from second floor to ground from fire escape.
- 126.—Ventilate top floor; door to Monroe street unlocked during working hours, and all setscrews guarded.
- 134.—Sworn statements for all children employed.
- 135.—Line shaft of sewing machine near operator's feet guarded.
- 140.—Reconstruct blower system on first and second floor; fire escape on south side of building.
- 152.—Shaft of sewing machine guarded.
- 153.—Separate closet for females.
- 157.—Separate closet for females.
- 158.—Separate closet for females.
- 161.—Sworn statement for one boy employed, and shaft of sewing machine guarded.
- 163.—Automatic gate for elevator and ladder from second floor to sidewalk for a fire escape.
- 180.—Setscrews guarded and automatic gates for elevator opening on second floor.
- 197.—All setscrews guarded.
- 202.—Automatic gates for elevator, and stairway entrance kept clear.
- 204.—Belt and drivewheel of engine guarded.
- 208.—Door to closet changed.
- 209.—All setscrews guarded.
- 211.—Sworn statements for all children employed; guard machinery in engine room; all setscrews and elevator shaft guarded.
- 212.—Alarm on boiler repaired or replaced by new one.
- 219.—Sworn statements for all children employed, and all setscrews guarded.
- 234.—All setscrews and freight elevator guarded; blow piping on belt sander reconstructed.
- 237.—Weights on windows by fire escapes, and low water alarms for five boilers.
- 246.—All setscrews and belt in carving room guarded; automatic gates for openings of elevator in machine room.
- 298.—Wheel by grinder guarded.
- 303.—Sworn statements for all children employed.
- 312.—Sworn statements for all children employed.
- 318.—Gearing and setscrews on Big Wonder guarded.
- 322.—Separate closet for females.

- 323.—Separate closet for females.
- 326.—Way to fire escape on second floor cleared; sworn statements for two children employed; belt running through second floor guarded and two additional closets for females.
- 330.—Blower on belt sander in bookcase department.
- 341.—Blower system repaired.
- 343.—Fire ladder extending to ground on east end of varnish room.
- 345.—All setscrews and slab saw guarded.
- 349.—Blower on sander.
- 353.—Piping on buffing wheel reconstructed.
- 359.—Separate closet for females.
- 362.—End of wall repaired.
- 386.—Guard all machinery in engine room and electric light room, main line shaft and overhead shaft gears on dryers, and belt in wood room; gears on pumps boxed, and repair automatic gates on elevators.
- 392.—Automatic gates on elevator opening.
- 393.—Machinery in engine, roller and trimming rooms guarded.
- 399.—Separate closet for females.
- 414.—Belts on dynamos guarded.
- 424.—Sworn statement for one boy employed.
- 427.—All setscrews guarded.
- 437.—Automatic gates on elevator opening on second floor.
- 438.—Spindle sander connected with blower.
- 441.—Automatic gates for elevator.
- 443.—Setscrews on second floor shaft and on line shaft in basement guarded.
- 450.—Separate closet for females.
- 451.—Scrap opening at second floor guarded.
- 457.—Railings around opening of outside stairs.
- 466.—Blower on sander reconstructed and all setscrews guarded.
- 468.—Belt and drivewheel on engine guarded.
- 475.—Resawing machine guarded.
- 485.—Automatic gates at elevator openings on second floor.
- 497.—All setscrews guarded.
- 523.—Sworn statements for all children employed; trough by waste pipe covered, and separate closet for females.
- 532.—All setscrews guarded.
- 538.—Sworn statement for all children employed; blower system repaired.
- 547.—Sworn statements for all children employed; four boys and one girl under 14 dismissed, and elevator gates repaired.
- 552.—Sworn statements for all children employed.
- 554.—Sworn statements for all children employed.
- 563.—Sworn statements for all children employed.
- 564.—Separate closet for females.
- 572.—Railing around drivewheel of engine.
- 573.—Low water alarm for boiler, and railing around stair opening.
- 592.—Fire escapes on north side of building, and separate closet for females.
- 600.—Setscrews guarded; railing around drive wheel; belts guarded running through floor, and stair door in machine room to open outward.
- 605.—Hoisting shaft guarded.
- 609.—Separate water closet for females.
- 610.—Belt on veneer machine guarded, and resawing machine boxed.

- 611.—Drive wheel of engine in machine room and all setscrews guarded, and band saw connected with blower.
- 641.—Railing around drive wheel of engine and stair opening.
- 642.—Automatic gates for elevator openings; main belt in machine room guarded.
- 646.—Drivewheel on engine guarded.
- 648.—Belt and shaft on circular saws boxed, and setscrews guarded.
- 649.—Railing around hog opening.
- 650.—Boiler alarm repaired.
- 663.—Belt and dynamos in electric light engine room guarded.
- 677.—Equalizing saws, and band saws connected with blower.
- 692.—Alarm on boiler repaired.
- 703.—Setscrews on stove machine guarded.
- 729.—Sworn statements for all children employed; edger connected with blower, and alarm on boiler repaired.
- 730.—Band saw and belt running through floor platform guarded.
- 735.—Separate closet for females.
- 760.—Alarm on boiler repaired.
- 768.—Boy under 14 discharged.
- 769.—Roller put in front of saws on edger.
- 772.—Roll in front of edger saw.
- 773.—Setscrews guarded, and front roll for edger.
- 775.—Front roll for edger.
- 777.—Setscrews guarded and front roll on edger.
- 778.—Gear on planer, main belt and drivewheel guarded.
- 782.—Equalizing saws guarded.
- 785.—Roll put in front of saws on edger.
- 806.—Repair hood on arm sander; box in bottom of band saw; guard flywheel on gaso-line engine; equip all dust creating machinery with blower system.
- 810.—Separate closet for females; automatic gates on elevator openings.

The numbers below are the factories in which low water alarms were ordered. A reference to the number given in the table will designate the name of these factories:

15, 20, 21, 22, 23, 26, 27, 34, 41, 43, 44, 45, 47, 48, 51, 52, 55, 58, 59, 61, 62, 67, 68, 69, 70, 71, 73, 75, 102, 132, 136, 137, 140, 142, 143, 150, 159, 164, 166, 167, 169, 175, 177, 178, 179, 181, 183, 184, 185, 186, 188, 197, 198, 199, 200, 201, 203, 205, 207, 209, 211, 213, 214, 215, 216, 217, 218, 219, 220, 225, 228, 234, 235, 236, 238, 242, 244, 245, 246, 247, 249, 252, 257, 258, 260, 261, 263, 269, 280, 282, 300, 301, 304, 305, 306, 313, 315, 316, 318, 321, 327, 332, 333, 336, 338, 340, 341, 342, 345, 349, 351, 354, 355, 356, 357, 358, 360, 362, 366, 371, 377, 378, 379, 382, 383, 385, 387, 389, 396, 397, 403, 405, 411, 413, 414, 417, 418, 422, 423, 424, 425, 426, 427, 428, 429, 432, 433, 436, 437, 438, 439, 440, 441, 443, 444, 446, 447, 451, 452, 453, 457, 458, 460, 461, 462, 463, 466, 467, 468, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 486, 487, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 518, 521, 523, 525, 526, 527, 528, 531, 532, 533, 536, 538, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 560, 561, 565, 568, 569, 570, 574, 575, 576, 578, 579, 580, 581, 582, 583, 585, 586, 587, 590, 598, 599, 600, 601, 602, 603, 604, 605, 607, 608, 609, 612, 613, 615, 616, 618, 619, 621, 622, 623, 630, 631, 632, 634, 635, 636, 638, 639, 640, 641, 642, 643, 644, 645, 648, 649, 650, 655, 658, 659, 669, 671, 672, 678, 681, 698, 701, 704, 711, 713, 714, 715, 716, 718, 719, 721, 727, 731, 732, 733, 734, 735, 736, 737, 741, 743, 744, 745, 749, 750, 752, 753, 754, 755, 756, 757, 758, 759, 762, 763, 764, 765, 766, 769, 770, 771, 772, 773, 775, 776, 778, 781, 782, 783, 784, 785, 786, 789, 790, 791, 794, 796, 797, 798, 800, 801, 802, 803, 804, 805, 806, 809, 810, 812.

Inspection District No. 3.

Accidents reported in

No. of factory for 1900.	Name of establishment.	Location.	Date of accident.	Name of person.	Age of person.	Native or foreign born.
24	Michigan Vapor Stove Co.....	Grand Rapids	Sept. 13, 1900.	James H. Norris.....	70	Nat.
26	Bissell Carpet Sweeper Co.....	" "	Jan. —, 1899.	Eugene Poole.....	20	"
28	" " " " " " " " " " " "	" "	Jan. 2, 1900.	Ed. Winn.....	41	"
72	Michigan Barrel Co.....	" "	Oct. 4, 1900.....	Joseph Billo.....	19	"
166	The Wernicke Co.....	" "	Oct. 30, 1899.....	John Brander.....	17	"
166	" " " " " " " " " " " "	" "	April 4, 1899.....	Harvey Whitney.....	16	"
166	" " " " " " " " " " " "	" "	Oct. 23, 1899.....	E. J. Blain.....	28	"
166	" " " " " " " " " " " "	" "	Mar. 5, 1899.....	John Slick.....	—	For.
214	Gunn Furniture Co.....	" "	April 4, 1900.....	Wm. Palmer.....	36	"
246	R. G. Widdicomb Co.....	" "	Oct. 13, 1900.....	Chas. Abraham.....	25	Nat.
304	Hake Mfg. Co.....	" "	Dec. 6, 1899.....	E. J. Blaine.....	35	For.
444	Walsh De Roo Milling Co.....	Holland	Oct. 5, 1900.....	Wm. Rosendahl.....	18	"
639	Butters & Peters Salt and Lum. Co.	Buttersville	July 18, 1900.....	Chas. Olson.....	17	"
650	Flier & Son.....	Flier City	Dec. 7, 1899.....	Julius Smith.....	—	"
658	R. G. Peters Salt and Lumber Co.....	East Lake	May 10, 1900.....	Theo. Staffnerk.....	50	"
669	Canfield & Wheeler Co.....	Manistee	July 19, 1900.....	Richard Boehr.....	17	"
685	Sands-Reitz Mill.....	"	May 10, 1900.....	Julius Gatzke.....	45	"
688	Louis Sands, Reitz plant.....	"	Mar. 29, 1900.....	Peter Olinchak.....	23	"
692	The Buckley & Douglass Lum. Co.....	"	Dec. 4, 1899.....	Frank Vitkoakl.....	40	"
730	Cobbs & Mitchell, Mill No. 1.....	Cadillac	May 11, 1900.....	John A. Wilson.....	18	Nat.
789	Streeter Lumber Co.....	Bay Mills..	Aug. 6, 1900.....	Wm. McPherson.....	20	"

DEDUCTIONS FROM ACCIDENT TABLE.

Number of accidents reported in 1900.....	21
Number of accidents reported in 1899.....	66
Per cent of accidents in 1900.....	2.7
Per cent of accidents in 1899.....	9.4
Number fatal accidents in 1900.....	6
Number fatal accidents in 1899.....	11
Number serious accidents in 1900.....	3
Number serious accidents in 1899.....	22
Number severe accidents in 1900.....	9
Number severe accidents in 1899.....	21
Number slight accidents in 1900.....	3
Number slight accidents in 1899.....	12
Average number days disabled for those injured, 45½.	
Number that were native born.....	11
Number that were foreign born.....	10
Number who were married.....	10
Number who were single.....	11
Number under 21 years of age.....	9
Number under 16 years of age.....	9

Factories inspected in 1900.

Was accident fatal, serious, severe or slight.	Was person married or single.	Cause of accident and nature of injury.	How many days disabled.	Were any wages paid during disability.	Were any benefits received during disability.	Was machinery properly guarded.	Was accident due to carelessness.
Fatal....	M	Basin of lacquer fell on lantern and ignited.....	35	Yes.	Yes.	Yes.	Yes.
Severe....	S	Inattention; put hand on saw; lost four fingers.....	60	No.	"	"	Yes.
.....	M	Knife too high; cut off three fingers.....	m	Yes.	"	Yes.	"
Serious....	S	Oiling machinery in motion; lost arm below elbow.....	7	No.	"	"	"
Slight....	"	Belt slipped while tightening; cut base of thumb.....	60	Yes.	"	"	"
Severe....	"	Hand slipped between cog wheels; lost three fingers.....	7	No.	"	"	"
Slight....	M	Belt slipped while tightening; cut thumb.....	30	Yes.	"	"	"
Severe....	"	Lost two fingers by being thrown on knives.....	m	No.	Yes.	"	"
Slight....	"	Lost end of finger and thumb; cause unknown.....	30	No.	"	"	"
Serious....	S	Hand slipped while pushing board; lost three fingers.....	21	"	"	"	"
Severe....	M	Caught hand; lost one finger.....	7	"	"	"	"
Fatal....	S	Supposed he was caught in shaft; killed.....	30	No.	Yes.	"	No.
.....	"	Killed; cause unknown; belt broken.....	m	Yes.	"	"	Yes.
Serious....	M	Log struck by carriage; leg broken.....	12	No.	"	"	"
Severe....	"	Lost arm; conveyor started while being cleaned.....	90	"	"	"	"
"	S	Caught hand in saw; lost two fingers.....	150	Yes.	Yes.	"	No.
"	M	Leg broken; fell from platform.....		"	"	"	"
Fatal....	S	Killed; piece of slab struck him.....		"	"	"	"
Severe....	M	Scalded; steam turned on while in boiler.....		"	"	"	"
Fatal....	S	Burned to death; cause unknown.....		"	"	No.	"
"	"	Hit on head by board from edger; killed.....		"	"	"	"

m Still disabled at inspection.

Age of oldest person injured, 70 years.

Age of youngest person injured, 16 years.

Average age of all persons injured, 29 years.

Number persons who received wages during disability..... 6

Number persons who did not receive wages during disability..... 9

Number of persons who received other benefits during disability..... 11

Number who did not receive other benefits during disability..... 5

Number of factories where machinery was properly guarded..... 10

Number where machinery was not properly guarded..... 2

Number of factories where accidents was due to carelessness..... 13

Number where accidents were not due to carelessness..... 3

There were 45 less accidents reported than in 1899. This is a remarkable showing and is highly commendable to the inspector and operators. The fatal accidents were five less, those reported serious were nineteen less, the severe 12 less, while those reported slight were nine less.

Those injured were disabled an average of 45½ days each.

The average age of those injured was one year less than in 1899. Nine of the injured were under 21 years of age, but none were under 16. The oldest person was 70 years of age, only one other reaching the age of 50. Eighteen of the accidents were due to carelessness, and in 10 cases the machinery was properly guarded, only two factories being otherwise reported.

Of the 15 accidents that were not fatal, six received wages during the time disabled, the other nine receiving no wages. Eleven of the 15 received benefits other than wages, while five did not receive such benefits.

FOURTH DISTRICT,

COMPOSED OF THE COUNTIES

Alcona,
Alpena,
Arenac,
Bay,
Cheboygan,
Crawford,

Genesee,
Gladwin,
Huron,
Iosco,
Lapeer,
Midland,

Montmorency,
Ogemaw,
Oscoda,
Otsego,
Presque Isle,
Roscommon,

Saginaw,
St. Clair,
Sanilac,
Shiawassee,
Tuscola.

JOHN J. CATHRO,

Deputy Inspector.

REPORT OF WORK IN THE FOURTH DISTRICT.

OFFICE OF DEPUTY FACTORY INSPECTOR, }
Alpena, Michigan, November 30, 1900.

Hon. Joseph L. Cox,

Commissioner of Labor and Chief Factory Inspector, Lansing, Mich.:

Dear Sir—I take pleasure in submitting to you my fourth annual report of inspection and revisiting the factories and workshops in the Fourth Inspection District of Michigan.

During the year there has been inspected 1,140 factories and there has been made 560 re-visits in this district. The nature of the work has been somewhat more arduous this year in consequence of the many additional provisions of law passed by the Legislature of 1897 and 1899, entailing a very large amount of new business; but our past experience has enabled us to get around with much greater facility and with the result that the ground covered is much larger and the number of inspections almost three times more than when we took up the work in 1897. Of the 1,140 factories inspected, only 67 were idle at the time of inspection, and of these at least one-half, such as brick yards and other special season factories, would work their regular time during the year, and several of the others were idle in consequence of fire or other accidents aside from lack of business.

SECTION 2—CHILD LABOR.

The number of children between the ages of 14 and 16 years employed shows a decided decrease in percentage, the total number being 256 children this year in 1,140 factories, against 246 children in 833 factories in 1899. The number of children under the age of 14 years discharged is larger than last year, being five, of whom three were in factories never before inspected. In the other cases the parties were prosecuted and convictions obtained. In four factories prosecutions were found necessary under the provisions of section 2. In 13 factories, 11 of which were inspected this year for the first time, proper sworn statements for the employment of children between 14 and 16 years of age were ordered.

THE PROVISIONS OF SECTION 5

were so well obeyed that only three orders were necessary for the protection of elevator openings, all of which orders were at once obeyed by the proprietor, and stairways were found in almost as good condition, only thirteen orders being necessary.

DANGEROUS MACHINERY.

Fifty-nine orders were found necessary for the proper protection of machinery, but with a few exceptions, they were almost immediately complied with; and I expect the others are so by now. This is a good showing, in view of the number of new factories and the number of changes in machinery in older ones.

EXHAUST FANS,

for which three orders were given, are very generally used in this district where required. There are, however, three factories in which we would like to have a system of collection established; but the conditions of manufacture seem to offer insuperable difficulties. We have the matter under careful consideration and will give the necessary orders as soon as a feasible plan presents itself. We refer in this to woodenware factories, of which there are at present three in the district.

. SECTION 10.

Separate water closets were ordered in ten places, and repairs to existing closets in four cases. Such necessities as closets and dressing rooms are being regarded much more favorably than formerly, but there is still a tendency to neglect their sanitary condition.

THE NEW SO CALLED SWEAT SHOP LAW

has had to have its provisions enforced in a few places in this district, mainly from the habit of merchant tailors giving work out to be executed in private houses—a very reprehensible practice as at any time dangerous diseases may break out in these houses. Permits were granted, on condition of a separate room being set aside for the work, in all cases except in one, in which the conditions were too unfavorable. A number of the employers also determined to have the work in the future done in their own shops. There are no large sweat-shops in this district.

STEAM BOILERS AND LOW WATER ALARMS.

The largest number of orders (750) given this year for any safety appliance, has been in fulfillment of the requirements of act No. 209, Public Acts of 1899, providing for the placing of low water alarms on steam boilers. In this connection 980 steam boilers were examined, of which 188 were found supplied with automatic alarms, and devices were ordered to be placed on 750; in the case of the other 42 we did not consider it necessary from the conditions of their use that they should be required to have them. Of the appliances in use when inspected, there were:

- 122 Reliance Safety Water Columns,
- 6 Pittsburg Safety Water Columns,
- 4 Monarch Safety Water Columns,
- 4 Wing Low Water Alarm Devices,
- 2 McLaughlin Low Water Alarms,
- 27 Sims Expansion Low Water Alarms,
- 3 Jones Low Water Alarms,
- 8 name unknown.

This portion of our business has made necessary a great deal of extra labor. In relation to it we have, besides sending the original orders, received and answered hundreds of communications and requests for information. While our orders for the placing of the devices were in some cases very ungraciously received, the larger part were promptly complied with, and many of the parties interested expressed satisfaction with the law and its requirements. We expect on further visitation to find all orders fully complied with.

In conclusion, sir, we have every reason to feel gratified at the results of our work in the Fourth District, and for the good feeling which exists between all parties concerned. While a number of complaints have been sent to us (every one of which was immediately investigated), I am glad to say they were, with two exceptions, uncalled for. These two were well founded, and convictions followed their prosecution. Four other prosecutions were found necessary, and convictions were finally obtained in all cases. When prosecutions had to be resorted to, it was in a proper spirit, and with the best results.

The conditions of prosperity attending manufacturing in this district fully bears out the expectations as expressed in our former reports.

I am, sir,

Yours very respectfully,

JOHN J. CATHRO,

Deputy Inspector.

Inspection Book No. 1.

Inspection District No. 4.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1	W. H. Geddert	Alpena	Cigars	7	6	8	26	12	\$1 83	None	....
2	Alpena Mattress Works	"	Mattresses	3	3	10	26	12	1 17	"	....
3	S. E. Hutton	"	Harnesses	4	3	10	26	12	2 17	"	....
4	C. W. Edwards	"	Cigars	8	7	8	26	12	1 71	"	....
5	D. D. Hanover	"	Harnesses	5	3	10	26	12	2 33	"	....
6	Alpena Echo	"	Newsp'rs, etc.	9	9	10	26	12	1 27	Elec.	....
7	McPhail & Ferguson	"	Printing	3	3	10	26	12	1 67	"	....
8	Echo Job Printing Office	"	"	4	3	10	26	12	1 83	"	....
9	Parisian Hand Laundry	"	Laundry	3	3	10	26	12	1 17	None	....
10	Potvin & Venners	"	Cigars	8	8	8	26	12	1 63	"	....
11	The Alpena Argus	"	Newsp'rs, etc.	6	6	10	26	12	1 25	St'm.	No
12	Alpena Bicycle Works	"	Bicycles	4	4	10	26	12	1 75	Ker's	Yes
13	Wm. H. Campbell	"	Plumbing	10	6	10	26	12	2 50	None	....
14	J. Levyn	"	Cigars	16	16	8	26	12	1 50	"	....
15	The Alpena Roller Flouring Mill	"	Feed, etc.	4	3	12	26	12	2 33	St'm.	No
16	James Walker & Sons	"	Veneer	23	23	10	26	11	1 52	"	....
17	C. Moench & Sons	"	Leather	102	72	10	26	12	1 94	"	Yes
18	M. Horwitz	"	Cigars	12	12	8	26	12	1 25	None	....
19	J. C. Melvor	"	Clothing	5	5	10	20	10	1 60	"	....
20	J. Cohen	"	"	5	1	10	26	9	2 00	"	....
21	Adolph Kamisky	"	"	3	3	10	26	10	2 00	"	....
22	Al. Brown	"	Excelsior	10	10	10	26	12	1 60	Rent.	....
23	Charles Reitzler	"	Clothing	7	5	10	26	12	1 40	None	....
24	George Burston	"	"	5	2	10	26	12	1 50	"	....
25	Ernest Byers	"	"	3	3	10	26	12	1 33	"	....
26	Minor Lumber Co.	"	Lumber, etc.	90	1	10	26	12	1 88	None	....
27	Venners & Johnston	"	Plumbing, etc.	9	8	10	26	12	1 50	"	....
28	Hawley & Fitzgerald	"	Millinery, etc.	16	16	9	26	12	1 50	"	....
29	Ben Kramer	"	Cloaks, etc.	14	1	10	26	12	1 50	"	....
30	Churchill's Laundry	"	Laundry	10	"	"	"	"	"	"	....
31	Alpena Elec. Light & Power Co.	"	Electricity	8	8	24	30	12	1 80	W'tr	....
32	Alpena City Water Works	"	Water	3	3	24	30	12	1 83	"	....
33	John Sinclair	"	Cloaks, etc.	14	14	10	26	12	1 28	None	....
34	Vienna Bakery	"	Baked goods	4	4	9	26	12	1 00	"	....
35	Alpena Excelsior Co.	"	Excelsior	30	30	10	26	12	1 67	Elec.	....
36	Eagle Bakery	"	Baked goods	3	3	12	26	12	1 50	None	....
37	G. Guenther	"	Cigars	3	2	8	26	12	2 25	"	....
38	Alpena Industrial Works	"	Machinery	12	12	10	26	12	2 50	St'm.	No
39	"	"	Wood turn'g	14	14	10	26	12	1 28	Rent.	....
40	Alpena Gas Co.	"	Gas	3	3	24	30	12	2 00	Gas.	....
41	Beck Malting & Brewing Co.	"	Beer, etc.	14	10	10	26	12	2 10	St'm.	No
42	Balkans Laundry	"	Laundry	11	6	10	26	12	1 08	"	....
43	P. Luther	"	Shingles, etc.	35	25	10	26	10	1 44	"	....
44	Huron Handle & Lumber Co.	"	Handles	55	55	10	26	10	1 44	"	....
45	Michigan Laundry	"	Laundry	14	8	10	26	12	1 25	"	....
46	The Alpena Printing Office	"	Printing	12	9	10	26	12	1 22	Elec.	....
47	West Bay City Sugar Co.	W. Bay City	Beet sugar	215	215	24	10	5	2 09	St'm.	Yes
48	Heavenrich Bros. & Co.	Saginaw	Clothing	4	4	10	26	12	1 75	None	....
49	Co-operative Tailors' Union	"	"	15	10	10	26	12	2 40	"	....
50	Beach & Reid	"	"	8	8	10	26	12	2 50	"	....

* Running day and night.

° Running 7 days per week.

u Running over 10 hours per day.

Inspection Book No. 2.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
51	Jules Aubry & Son.....	Saginaw...	Dyeing, etc...	5	5	10	20	12	\$1 00	St'm.	No
52	Erd Plano & Harp Co.....	"	Harps, etc.....	40	17	10	26	12	2 82	"	"
53	John Depper & Co.....	"	Clothing.....	3	2	10	26	12	2 50	None	"
54	A. P. Tripp.....	"	"	8	8	10	26	12	2 00	"	"
55	A. Bernhardt.....	"	Repairs, etc...	3	2	10	26	12	1 25	"	"
56	Wylie Mfg. Co.....	"	Overalls, etc.	60	51	10	26	12	91	St'm.	No
57	Loudens City Laundry.....	"	Laundry.....	7	3	10	26	12	1 67	"	"
58	John Gast.....	"	Clothing.....	7	3	10	26	12	1 67	None	"
59	Henry Alter.....	"	"	4	4	10	26	12	1 35	"	"
60	F. W. Eisenberg.....	"	"	4	4	10	26	12	1 50	"	"
61	H. H. Boergert.....	"	"	4	3	10	26	12	1 50	"	"
62	Witters Laundry.....	"	Laundry.....	35	35	10	26	12	1 50	St'm.	No
63	Avery & Co.....	"	Sash, etc.....	51	51	10	26	12	1 57	"	"
64	Opperman Fur Co.....	"	Fur.....	10	6	10	26	12	2 00	None	"
65	Botenshoen & Son.....	"	Clothing.....	4	2	10	20	9	2 50	"	"
66	French Steam Dye House.....	"	Dyeing.....	5	3	10	26	8	1 33	"	"
67	W. L. Webber, Trustee.....	"	Steam power.	2	1	10	26	12	1 13	St'm.	No
68	The Exponent.....	"	Newsp's, etc.	7	7	8	26	12	1 72	None	"
69	Smith-Heinecke Co.....	"	Printing.....	5	4	9	26	12	2 00	Elec.	"
70	O. M. Fausch.....	"	Engraving.....	3	2	10	26	12	3 00	"	"
71	Saginaw Post-Zeitung.....	"	Newsp's, etc.	9	9	9 1/2	26	12	1 56	None	"
72	J. G. Fischer.....	"	Bicycles.....	8	8	10	26	12	1 50	Elec.	"
73	Koehler Bros.....	"	Machinery.....	6	6	10	26	12	2 83	St'm.	No
74	Cooney & Smith.....	"	Matt'ees, etc.	20	13	10	26	11	1 61	Rent.	"
75	Saginaw Publishing Co.....	"	Printing, etc.	9	9	10	26	12	1 56	Elec.	"
76	Barrows Music Co.....	"	Mandolins, etc	15	15	10	26	12	3 00	"	"
77	Porteous, Mitchell & Co.....	"	Millinery, etc	10	6	8	26	12	1 13	None	"
78	Michigan Saw Co.....	"	Saws.....	20	20	10	26	12	1 90	St'm.	No
79	T. E. Talmage.....	"	Harnesses.....	5	3	10	26	12	2 33	None	"
80	O. T. Smith.....	"	"	4	2	10	26	12	2 50	"	"
81	Saginaw Dry Goods Co.....	"	Dresses, etc...	23	14	10	26	12	1 07	"	"
82	Courier Printing & Binding Co..	"	Printing.....	12	12	9	26	12	1 66	Elec.	"
83	Freedman & Hyman.....	"	"	5	3	10	26	12	1 66	"	"
84	Valley Printing Co.....	"	"	10	10	10	26	12	1 57	"	"
85	The Smart & Fox Co.....	"	Spices.....	3	3	10	26	12	1 50	Rent.	"
86	F. B. Taft.....	"	Plating.....	3	2	10	26	12	1 37	"	"
87	G. L. Buchiet.....	"	Woodwork.....	7	7	10	26	12	1 60	"	"
88	Wm. Schuette & Co.....	"	Dressed lum.	90	90	10	26	12	1 40	St'm.	No
89	F. W. & F. Carlisle.....	"	Leather.....	60	60	10	26	12	1 44	"	"
90	Louis Kriss.....	"	Machinery.....	5	1						
91	Pere Marquette R. R. Rep. & Car Shop	"	Repairs, etc...	445	445	10	26	12	1 87	St'm.	No
92	U. S. Graphite Co.....	"	Graphite.....	23	23	10	26	12	1 74	"	"
93	Saginaw Candy Co.....	"	Candies.....	10	10	10	26	12	70	None	"
94	Hobson & Co.....	"	Monum'ts, etc	25	20	9	26	12	2 50	St'm.	No
95	Samson Printing Co.....	"	Printing.....	3	1						
96	Alex. Biras.....	"	Carriages, etc	9	6	9	26	12	2 16	None	"
97	Swift Electric Light Co.....	"	Electricity...	18	18	24	30	12	2 11	St'm.	No
98	Jas. Kanaly.....	"	Printing.....	3	2	10	26	12	1 75	None	"
99	Saginaw Cycle & Model Works..	"	Models, etc...	6	4	10	26	12	1 25	Gas'ne	"
100	Sag. Muslin Underwear Co.....	"	Underwear...	30	30	10	26	12	70	Elec.	"

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 3.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
101	C Star Mills.....	Saginaw	Flour, etc.....	7	7	10	26 12		\$1 50	St'm.	No
102	Robertson's Laundry.....	"	Laundry.....	37	37	10	26 12		81	"	"
103	Stengel Bros.....	"	Meat.....	13	3	10	26 12		1 67	"	"
104	Wm. K. McIntyre.....	"	Printing.....	3	2	10	26 12		1 75	Gas'ine	"
105	C. A. Ganschow.....	"	".....	3	1						
106	C. Wassermann.....	"	Clothing.....	3	2	10	26 12		2 00	None	"
107	G. A. Robel.....	"	".....	3	3	10	26 12		2 00	"	"
108	J. M. Roberts.....	"	Cigars.....	21	21	8	26 12		1 60	"	"
109	M. Friedman.....	"	Printing.....	3	2	10	26 12		1 62	"	"
110	M. E. Keller.....	"	Bookbinding.....	3	3	10	26 12		1 17	"	"
111	H. H. Brix.....	"	Furs.....	7	4	9	26 12		1 25	"	"
112	Miss A. DeBeaux.....	"	".....	6	3	10	26 12		1 08	"	"
113	Carl Operman.....	"	Harnesses.....	4	2	10	26 12		1 75	"	"
114	John Stafford.....	"	Soft drinks.....	5	3	10	26 12		2 00	"	"
115	M. Lindlaw.....	"	Cigars.....	3	1	8	26 12		1 75	"	"
116	F. H. Mertz.....	"	".....	12	12	8	26 12		1 75	"	"
117	J. B. Beck.....	"	Carriages.....	15	10	10	26 12		1 80	"	"
118	Jacob Raquet.....	"	Beer.....	9	9	12	26 12		2 56	St'm.	Yes
119	Joseph Marks.....	"	Cigars.....	9	9	8	26 12		1 53	None	"
120	Bastian Bros.....	"	Printing.....	6	6	10	26 12		1 66	Elec.	"
121	The Saginaw Courier-Herald.....	"	Newsp'rs, etc.....	38	38	10	26 12		2 24	S & E	Yes
122	Morley Bros. Saddlery Co.....	"	Horse collars.....	20	20	10	26 12		1 60	None	"
123	".....	"	Harnesses.....	26	21	10	26 12		1 43	"	"
124	".....	"	Tools.....	12	12	10	26 12		1 67	Rent.	"
125	Wickes Bros.....	"	Bollers, etc.....	237	237	10	26 12		1 80	St'm.	Yes
126	Saginaw Publishing Co.....	"	Printing.....	3	2	10	26 12		1 50	Gas'ine	"
127	Fleze Desk Works.....	"	Desks.....	30	30	10	26 12		1 67	St'm.	No
128	Lufkin Rule Co.....	"	Rules.....	143	143	10	26 12		1 06	"	Yes
129	Farmers Handy Wagon Co.....	"	Wagons.....	41	41	10	26 12		1 41	"	No
130	Saginaw Clay Mfg. Co.....	"	Brick.....	40	26	10	26 10		1 73	"	"
131	East Side Pumping Station.....	"	Water.....	6	6	a24	o30 12		2 18	"	"
132	Tindal & Jackson.....	"	Heading.....	50	50	10	26 12		1 26	"	"
133	J. T. Wyllie & Co.....	"	Hoops.....	50	45	10	26 9		1 44	"	"
134	A. C. White.....	"	Dressed lum.....	125	125	10	26 12		96	"	Yes
135	Simpson Co.....	"	Lumber.....	31	1						
136	Wm. Williamson.....	"	Machinery.....	25	"						
137	Michigan Lumber Co.....	"	Lumber.....	40	"						
138	Saginaw Brewing Co.....	"	Beer.....	8	8	10	26 12		2 00	St'm.	No
139	East Saginaw Gas Co.....	"	Gas.....	8	8	a24	o30 12		1 94	"	"
140	M. Brooker.....	"	Boats, etc.....	3	3	10	26 12		2 33	None	"
141	McLellan File Works.....	"	Files.....	50	1						
142	Booth & Boyd Lumber Co.....	"	Dressed lum.....	51	51	10	26 12		1 47	St'm.	No
143	Allington & Curtis.....	"	Dust Col.....	155	155	10	26 12		1 70	"	"
144	Mitts & Merrill.....	"	Machines, etc.....	60	49	10	26 12		1 84	Rent.	"
145	A. F. Bartlett & Co.....	"	".....	127	127	10	26 12		1 45	"	"
146	Bartlett Illuminating Co.....	"	Electricity.....	38	37	a24	o30 12		1 96	St'm.	No
147	L. Clinkofatine.....	"	Rags, etc.....	10	5	10	26 12		1 35	None	"
148	Charles Lee.....	"	Sash, ".....	35	26	9	26 12		1 15	St'm.	No
149	Jochin Wreckage & Cont'g Co.....	"	Lumber, etc.....	28	28	10	26 5		1 43	"	"
150	Chas. Desham.....	"	Hoops.....	9	6	10	26 12		1 68	None	"

* Running day and night.
 a Running over 10 hours per day.
 o Running 7 days per week.

Inspection Book No. 4.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. I for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
151	L. A. Potter.....	Saginaw.....	Printing, etc.	3	3	10	26	12	\$0 83	None	....
152	Seamer & Peters.....	"	"	38	38	9	26	12	1 66	St'm.	Yes
153	Saginaw Evening News.....	"	Newsp'er, "	32	32	8 1/2	26	12	2 03	Elec.	....
154	James O'Hara.....	"	Clothing	4	3	10	26	12	1 67	None	....
155	Ed. Germain.....	"	Sash, etc.	225	142	10	28	12	1 20	St'm.	No
156	O'Donnell, Spencer & Co.....	"	"	180	I	10	26	12	2 70	St'm.	Yes
157	The National Brewery.....	"	Beer	10	10	10	26	12	1 47	None	....
158	The Famous Cigar Co.....	"	Cigars	15	15	8	26	12	1 50	St'm.	No
159	Palmerton Wooden Ware Co.....	"	Tubs, etc.	225	225	10	26	10	93	"	....
160	Carter Crume Co.....	"	Butter dishes	135	135	10	26	10	1 22	"	Yes
161	Saginaw Basket Co.....	"	Baskets	150	90	10	26	10	1 73	"	No
162	A. T. Ferrell & Co.....	"	Seed cleaners	15	15	10	26	12	1 47	"	Yes
163	The Keystone Shade Roller Co.....	"	Rollers	100	80	10	26	12	1 22	"	No
164	Saginaw Specialty Co.....	"	Boxes	65	46	10	26	12	1 06	"	Yes
165	The Best Manufacturing Co.....	"	Tooth picks, etc.	100	100	10	26	12	1 10	"	No
166	Thos. Jackson & Co.....	"	Sash, etc.	120	113	10	26	12	1 56	"	....
167	J. H. Malcolm & Co.....	"	Salt	9	9	24	30	12	2 00	"	....
168	The Saginaw Gas Co., west side.	"	Gas	4	4	12	30	12	1 75	None	....
169	Saginaw Manufacturing Co.....	"	Pulleys, etc.	293	293	10	26	12	98	"	....
170	Asphalt Roofing Co.....	"	Roofing	14	9	10	26	12	1 80	"	....
171	Bliss & Van Auker.....	"	Dressed lum.	135	135	10	26	12	2 50	St'm.	No
172	" " "	"	Salt	11	11	24	30	12	1 67	"	....
173	C. H. Cobb.....	"	Barrels	9	8	10	26	12	1 87	"	....
174	American Potato Flour Co., Ltd.	"	Flour, etc.	50	I	10	26	12	1 62	Elec	....
175	D. Hardin & Co.....	"	Sash, "	20	15	10	26	12	2 20	"	....
176	Brand & Hardin.....	"	Flour, "	17	17	24	30	12	1 50	None	....
177	Stenglein Manufacturing Co.....	"	Furniture	45	45	10	26	12	1 94	None	....
178	E. A. Robertson & Co.....	"	Shirt waists.	90	70	10	26	12	1 87	"	....
179	Saginaw Suspender Co.....	"	Belts, etc.	3	I	10	26	12	1 50	None	....
180	T. C. Busch.....	"	Binding	3	2	10	26	12	1 67	"	....
181	F. R. Ganschow & Son.....	"	Printing.....	3	3	10	26	12	1 30	St'm.	No
182	Peerless Laundry.....	"	Laundry	12	12	10	26	12	1 62	"	....
183	Bartlett Illuminating Co.....	"	Electricity	4	4	12	30	4	1 50	"	....
184	Herzog Art Furniture Co.....	"	Furniture	13	5	10	26	12	1 94	None	....
185	Wolverine Cigar Co.....	"	Cigars	36	36	8	26	12	1 87	"	....
186	John Deibel.....	"	"	8	8	8	26	12	1 67	"	....
187	John W. Richardson.....	"	Harnesses	4	3	10	26	12	1 50	"	....
188	John Otto.....	"	Cigars	3	3	8	26	12	1 55	"	....
189	McPhee Tailoring Co.....	"	Clothing	4	3	10	26	12	2 20	"	....
190	Alfred Malmberg.....	"	"	5	5	10	26	12	1 50	"	....
191	J. P. Beyerlein.....	"	"	5	5	10	26	12	3 00	St'm.	No
192	West Side Pumping Station.....	"	Water	5	5	24	30	12	2 00	Gas	....
193	Smith & Stoelker Publishing Co.	"	Printing.....	12	11	9	26	12	2 00	None	....
194	The Valley News.....	"	Newsp'er, etc.	3	2	10	26	12	1 05	St'm.	No
195	Saginaw Steam Laundry.....	"	Laundry	19	19	10	26	12	1 44	"	Yes
196	Jackson & Church Co.....	"	Machinery	90	90	10	26	12	1 62	Elec	....
197	The City Mills.....	"	Flour, etc.	3	2	10	26	12	2 00	St'm.	No
198	Eagle Brewery.....	"	Beer	5	5	11	26	12	1 67	None	....
199	W. H. Grenell.....	"	Seed cleaning	100	3	10	26	12	1 75	"	....
200	The Magnetic Spring and Cold Storage Co.	"	Carbon water	5	4	10	26	12			

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 5.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
201	Remer Bros.....	Saginaw.....	Lime, etc.....	16	16	10	26	12	\$1 50	St'm.	No
202	O. W. Wright & Co.....	"	Salt.....	130	1	"	"	"	"	"	"
203	J. G. Schemm.....	"	Beer.....	21	21	10	26	12	2 00	St'm.	Yes
204	Werner & Pfeiderer.....	"	Baker's sup.....	26	26	10	26	12	1 92	"	No
205	Henry Passolt.....	"	Soap.....	8	8	10	26	12	1 62	"	"
206	Dederich's Bottling Works.....	"	Soft drinks.....	4	3	10	26	12	1 67	"	"
207	The Saginaw Milling Co.....	"	Flour, etc.....	80	44	24	26	12	1 64	"	"
208	J. L. Weigl.....	"	Clothing.....	4	2	10	26	12	1 50	None	"
209	Durand Electric Light Plant.....	Durand.....	Electricity.....	3	2	12	30	12	1 50	St'm.	No
210	C. & G. T. R. R. Repair Shops.....	"	Repairs.....	36	36	10	26	12	2 25	"	"
211	A. A. R. R. Repair Shop.....	"	".....	35	35	10	26	12	2 10	"	"
212	F. E. Leonard.....	"	Sash, etc.....	6	1	"	"	"	"	"	"
213	I. W. Barnard.....	"	Lumber.....	18	16	10	26	8	1 63	St'm.	No
214	R. K. Perry.....	"	Flour, etc.....	3	1	"	"	"	"	"	"
215	Durand Milling Co.....	"	".....	4	3	10	26	12	2 00	Gas'ine	"
216	Durand Brick & Tile Co.....	"	Brick.....	22	1	"	"	"	"	"	"
217	Banner Steam Laundry.....	"	Laundry.....	6	4	10	26	12	1 19	St'm.	No
218	F. J. Twogood.....	"	Sash, etc.....	3	3	10	26	12	1 75	"	"
219	Fenton Steam Laundry.....	Fenton.....	Laundry.....	4	4	10	26	12	1 25	"	"
220	Fenton Water Works.....	"	Water.....	4	4	24	30	12	1 75	"	"
221	The A. J. Phillips Co.....	"	Screen's.....	112	112	10	26	12	1 24	"	"
222	Fenton Milling Co.....	"	Flour, etc.....	10	9	11	26	12	1 67	"	"
223	The Fenton Independent.....	"	Newsp'r's, etc.....	5	5	10	26	12	1 60	Rent	"
224	M. Walker.....	"	Pumps, etc.....	20	10	10	26	12	2 06	St'm.	No
225	Fenton Elec. Lt. & Power Co.....	"	Electricity.....	3	3	8	30	12	2 17	"	Yes
226	Fred Welch.....	"	Feed, etc.....	4	3	6	26	12	1 50	"	No
227	Burdock Potter.....	"	Produce.....	3	3	10	26	12	1 50	Gas'ine	"
228	Wightman & Worden.....	"	Harnesses.....	4	3	10	26	12	1 75	None	"
229	The Fenton Courier.....	"	Newsp'r's, etc.....	4	3	10	26	12	1 33	"	"
230	The New Troy Steam Laundry.....	Flint.....	Laundry.....	6	6	10	26	12	1 00	St'm.	No
231	F. Pearson.....	"	Printing.....	7	5	10	26	12	1 40	Gas.....	"
232	The Flint Steam Dye Works.....	"	Dyeing.....	3	2	10	26	12	1 50	St'm.	No
233	The Palace Laundry.....	"	Laundry.....	6	4	10	26	12	1 06	"	"
234	Stern & Holmes.....	"	Plumb. sup.....	10	10	10	26	12	1 90	"	Yes
235	M. C. Bowman.....	"	Cigars.....	8	5	8	26	12	1 60	None	"
236	Princess Manufacturing Co.....	"	Skirts.....	15	15	10	21	12	65	Gas.....	"
237	The Daily News.....	"	Newsp'r's, etc.....	10	9	10	26	12	1 55	St'm.	No
238	The Flint Cigar Co.....	"	Cigars.....	31	31	8	26	12	1 58	None	"
239	F. W. Dalzell.....	"	Binding.....	3	3	10	26	12	1 33	"	"
240	Holmes & Wells.....	"	Cigars.....	26	16	8	26	12	1 67	"	"
241	The Flint Pantalon Co.....	"	Pants.....	70	42	10	26	12	52	St'm.	No
242	F. H. Parker.....	"	Clothing.....	4	4	10	26	12	1 75	None	"
243	Flint Evening News.....	"	Newsp'r's, etc.....	11	11	10	26	12	1 36	Gas'ine	"
244	C. J. Haas.....	"	Clothing.....	11	11	10	26	12	1 50	None	"
245	Weller & Austin.....	"	Printing.....	8	8	10	26	12	1 88	St'm.	No
246	Flint City Mills.....	"	Flour, etc.....	23	23	10	26	12	1 43	"	Yes
247	Flint Wooden Works.....	"	Sash, etc.....	12	10	10	26	12	1 50	"	No
248	The W. F. Stewart Co.....	"	Veh cle works.....	200	200	10	26	12	1 50	"	"
249	Railroad Elevator.....	"	Produce.....	4	1	"	"	"	"	"	"
250	Perfection Fixture Co.....	"	Store fittings.....	6	6	10	26	12	1 56	None	"

* Running day and night.

° Running 7 days per week.

° Running over 10 hours per day.

Inspection Book No. 6.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled	Number of employees when running full capacity.		Number of employees at time of inspection.	I for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
251	The Barney Marble & Granite Wks.	Flint	Cut stone	22	21	10		26 12	26 12		\$2 14 St'm.	No	
252	The Wolverine Citizen	"	Newsp'r's, etc.	7	7	10		26 12	26 12		1 30 Gas'ne	"	
253	Veit & Perry	"	Harnesses	9	8	10		26 12	26 12		1 25 None	"	
254	Genesee Flour Mills	"	Flour, etc.	6	6	10		26 12	26 12		1 60 W'tr.	"	
255	The Armstrong Spring Co.	"	Springs	100	40	10		26 12	26 12		1 45 St'm.	No	
256	Home Steam Laundry	"	Laundry	20	18	10		26 12	26 12		78	"	"
257	C. Stevens	Clio	Lumber	6	5	10		26 12	26 12		1 80	"	"
258	Clio Cheese Factory	"	Cheese	4	1								
259	Thos. Olliff	"	Brick	15	15	10		26 12	26 12		1 93 St'm.	No	
260	Hathaway & Kelsey	"	Electricity	3	3	6		30 12	2 00		"	"	
261	J. Wellman	"	Produce	30	1								
262	Slater & Walters	Flint	Clothing	7	6	10		26 12	26 12		1 33 None	"	
263	R. Taylor	"	"	3	2	10		26 12	26 12		1 62	"	
264	M. Ephraim	"	Cigars	16	12	8		26 12	26 12		1 43	"	
265	Stone, Atwood & Co.	"	Woolengoods	100	82	10		26 12	26 12		1 12 St'm.	Yes	
266	Durant-Dort Carriage Co.	"	Vehicles	300	300	10		26 12	26 12		1 67	"	"
267	J. S. Brooks	"	Brooms	10	6	10		26 12	26 12		1 66 None	"	
268	Genesee Iron Works	"	Machinery	7	7	10		26 12	26 12		1 72 St'm.	No	
269	G. W. Sweet	"	Ladders, etc.	6	2	10		20 12	1 62		"	"	
270	People's Elec. Lt. & Power Wks.	"	Electricity	10	10	24		30 12	2 25		"	"	
271	Flint Gear & Top Co.	"	Tops, etc.	75	75	10		20 12	1 60		"	"	
272	C. Ripple	"	Cigars	8	7	8		26 12	1 43		None	"	
273	Abe Davis	"	"	23	23	8		26 12	1 30		"	"	
274	Flint Wagon Works	"	Vehicles	280	260	10		26 12	1 27		St'm.	Yes	
275	J. L. Wilcox & Son	"	Lumber, etc.	14	5	10		26 12	1 60		"	No	
276	F. R. Lewis Manufacturing Co.	"	Paper	21	21	24		26 12	1 43		"	"	
277	Flint Brewing Co.	"	Beer	12	11	10		26 12	2 08		"	"	
278	Thread Mill Cooperage Co.	"	Stock	15	4	10		26 12	1 62		"	"	
279	Flint City Water Co.	"	Water	3	3	24		30 12	2 67		"	"	
280	Houran & Whitehead	"	Sash, etc.	35	35	10		26 12	1 37		"	"	
281	A. Bradford & Sons	"	Stock	34	24	10		26 12	1 12		"	"	
282	Babcock Lumber Co.	"	Lumber	13	11	10		26 12	1 82		"	"	
283	McCormick Harness Co.	"	Harnesses	42	42	10		26 12	1 80		Gas'ne	"	
284	W. P. Cook	"	Whip sockets	12	12	10		26 12	1 39		"	"	
285	Webster Vehicle Co.	"	Vehicles	118	118	10		26 12	1 62		St'm.	Yes	
286	G. M. Shear	"	Rags, etc.	6	4	10		26 12	1 50		None	"	
287	The Mezzette Vehicle Co.	"	Vehicles	8	8	10		26 12	1 50		"	"	
288	Flint Creamery	"	Butter, etc.	3	3	10		26 12	1 50		St'm.	No	
289	The Diamond Buggy Co.	"	Vehicles	130	120	10		26 12	1 80		"	"	
290	Flint Cabinet Creamery Co.	"	Creameries	6	3	10		26 12	1 83		None	"	
291	S. C. Randall & Co.	"	Lumber	30	30	10		26 12	1 67		St'm.	No	
292	Central Flour Mills	"	Flour, etc.	3	3	10		26 12	1 67		"	"	
293	Clasen, Street & Co.	"	Cigars	20	20	8		26 12	1 40		None	"	
294	Scott & McGlinchey	"	"	6	4	8		26 12	1 75		"	"	
295	C. H. Ward	"	"	3	2	8		26 12	1 75		"	"	
296	W. A. Patterson Co.	"	Vehicles	350	350	10		26 12	1 34		St'm.	No	
297	Edwards Bros.	"	Produce	26	6	10		26 12	1 75		None	"	
298	Flint Hand Laundry	"	Laundry	6	3	10		26 12	90		"	"	
299	Cole & Cole	"	Clothing	7	7	10		26 12	1 86		"	"	
300	Chas. Crawford	"	"	3	3	10		26 12	1 58		"	"	

* Running day and night.
 • Running 7 days per week.

Inspection Book No. 7.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
301	R. Putnam & Co.....	Flint.....	Produce.....	22	4	10	26 12	\$1 88	None	....	....
302	Frank A. Gillies.....	".....	Clothing.....	4	3	10	26 12	1 90	"	....	....
303	American Tailoring Co.....	".....	".....	3	3	10	26 12	1 16	"	....	....
304	R. Ford.....	".....	".....	4	3	10	26 12	1 67	"	....	....
305	M. Fenner.....	".....	Millinery.....	9	4	10	26 12	1 75	"	....	....
306	E. Jennings.....	Pinconning	Heading.....	32	32	10	26 12	1 56	St'm.	No	....
307	".....	".....	Staves, etc.....	27	1	10	26 12	1 90	"	....	....
308	".....	".....	Excelsior.....	3	3	10	26 5	1 74	St'm.	No	....
309	C. H. Ford.....	".....	Staves.....	45	23	10	26 12	1 25	None	....	....
310	Jacob Edwards.....	".....	Hoops.....	5	1	10	26 12	1 25	None	....	....
311	Pinconning Water Pump Station	".....	Water.....	1	1	24	30 12	1 70	St'm.	No	....
312	James Moran.....	Standish.....	Lumber.....	35	35	10	26 12	1 71	"	....	....
313	Standish Cheese Factory.....	".....	Cheese.....	3	2	10	30 7	2 00	"	....	....
314	Gray Milling Co.....	".....	Shingles.....	10	1	10	26 12	1 77	St'm.	No	....
315	".....	".....	Flour, etc.....	5	5	10	26 12	1 77	St'm.	No	....
316	E. J. Austin.....	".....	Shingles.....	10	1	10	26 6	1 43	St'm.	No	....
317	M. Perlberg.....	".....	Brick.....	7	7	10	26 10	1 07	"	....	....
318	Mich. Mfg. & Mercantile Co.....	".....	Heading.....	45	45	10	26 10	1 07	"	....	....
319	".....	".....	Staves.....	80	80	10	26 7	1 14	"	....	....
320	Omer Roller Mill.....	Omer.....	Flour, etc.....	6	6	10	26 12	1 95	W't'r.	....	....
321	Gorrie & Kent.....	".....	Lumber.....	23	23	10	26 8	1 75	"	....	....
322	W. R. Clouston.....	".....	" etc.....	12	1	10	26 12	1 50	None	....	....
323	Squires & Sterling.....	".....	Staves.....	35	26	10	26 10	1 61	St'm.	No	....
324	".....	".....	Shingles, etc.....	26	26	10	26 12	1 50	None	....	....
325	Omer Progress.....	".....	Newspapers, etc.....	2	2	10	26 12	1 50	None	....	....
326	John Loverock.....	Owosso.....	Screens, etc.....	10	10	10	26 9	1 20	St'm.	No	....
327	Owosso Mfg. Co.....	".....	".....	300	132	10	26 10	1 13	"	Yes	....
328	John Brooks & Son.....	".....	Feed, etc.....	4	4	10	26 12	1 69	Gas	....	....
329	Mueller Bros.....	".....	Beer.....	10	10	10	26 12	3 00	St'm.	No	....
330	Owosso Steam Laundry.....	".....	Laundry.....	18	14	10	26 12	1 07	"	Yes	....
331	Union Mattress Co.....	".....	Mattresses.....	12	9	10	26 12	1 11	"	No	....
332	Owosso Handle Factory.....	".....	Handles, etc.....	18	12	10	26 10	1 58	"	Yes	....
333	Owosso Poultry Co.....	".....	Poultry.....	60	3	10	26 12	2 00	None	....	....
334	J. M. Story.....	".....	Spokes.....	7	7	10	26 9	1 39	St'm.	Yes	....
335	H. M. Mason & Sons.....	".....	".....	12	1	10	26 12	1 50	None	....	....
336	A. T. Phillips.....	".....	Toe pads.....	3	3	10	26 12	1 50	None	....	....
337	Owosso Casket Works.....	".....	Caskets.....	185	165	11	26 12	1 58	St'm.	No	....
338	Esty Mfg. Co.—Factory B.....	".....	Furniture.....	165	147	10	26 10	1 50	"	....	....
339	Vincent Valve Co.....	".....	Valves.....	35	35	10	26 12	2 14	"	Yes	....
340	Owosso Gas Works.....	".....	Gas.....	4	4	10	26 12	2 25	"	....	....
341	Miles Parker.....	".....	Brick.....	12	12	10	26 6	1 75	"	....	....
342	R. M. & M. L. Marshall.....	".....	Bean clean'g.....	2	2	10	26 12	1 87	Elec.	....	....
343	Owosso Boiler Works.....	".....	Boilers, etc.....	3	3	10	26 12	1 91	None	....	....
344	Owosso Carriage Co.....	".....	Vehicles.....	160	160	10	26 12	1 44	"	....	....
345	A. & H. Frieske.....	".....	Brick.....	25	18	10	26 6	1 78	St'm.	No	....
346	Muskegon Bottling Works.....	".....	Beer.....	4	4	10	26 12	1 52	None	....	....
347	Michigan Package Co.....	".....	Butter pkgs.....	8	1	10	26 12	1 80	Elec.	....	....
348	Owosso City Mills.....	".....	Flour, etc.....	5	5	10	26 12	1 80	Elec.	....	....
349	Shiawassee Boiler Works.....	".....	Repairs.....	3	3	10	26 12	2 00	None	....	....
350	Estey Mfg. Co.—Factory A.....	".....	Furniture.....	276	276	10	26 12	1 70	St'm.	No	....

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 8.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
351	A. A. R. R. repair shops.....	Owosso.....	Repairs.....	165	165	10	26	12	\$1 83	St'm.	No
352	Owosso Water Works.....	"	Water.....	3	3	24	30	12	1 50	"	Yes
353	Finlay's Bottling Works.....	"	Beer.....	3	3	10	26	12	1 50	None	"
354	E. P. Dudley.....	"	Produce.....	12	12	10	26	12	1 75	St'm.	Yes
355	Harrison Swan & Co.....	"	Poultry, etc.....	50	1	10	26	12	1 58	"	Yes
356	Owosso Stave Factory.....	"	Staves.....	12	"	10	26	12	1 67	Gas.	"
357	Central Mills Elevator No. 2.....	"	Feed, etc.....	3	3	10	26	12	2 00	None	"
358	Owosso Monumental Works.....	"	Cut stone.....	6	4	10	26	12	1 70	St'm.	No
359	Symes & Sanderhoff.....	"	Lumber.....	10	10	10	26	5	1 70	St'm.	No
360	Robins Table Co.....	"	Tables.....	54	54	10	26	12	1 58	"	Yes
361	The Owosso & Corunna Elec. Co.....	"	Electricity.....	9	9	24	30	12	1 89	"	"
362	A. Staggall.....	"	Machinery.....	8	8	10	26	12	1 75	"	No
363	Hodgins Bros.....	"	Cigars.....	3	3	8	26	12	1 75	None	"
364	The Deckert Tailoring Co.....	"	Clothing.....	6	5	10	26	12	1 60	"	"
365	Owosso Press.....	"	Newsp'r's, etc.....	4	4	10	26	12	1 88	Elec.	"
366	The Owosso Times.....	"	"	8	8	10	26	12	1 31	"	"
367	Green & Reva.....	"	Clothing.....	4	4	10	26	12	2 12	None	"
368	A. Stephan.....	"	Cigars.....	7	5	8	26	12	1 20	"	"
369	Shiawassee Reporter.....	"	Newsp'r's, etc.....	4	4	10	26	12	1 12	"	"
370	The American Pub. Co.....	"	"	12	12	10	26	12	1 25	Elec.	"
371	The Recorder Pub. Co.....	"	"	5	5	10	26	12	1 20	"	"
372	The Argus Pub. Co.....	"	"	13	13	10	26	12	1 46	Gas'ine	"
373	The Electric Laundry.....	"	Laundry.....	6	6	10	26	12	1 16	St'm.	No
374	Mason St. Granite Works.....	"	Cut stone.....	4	4	10	26	12	2 28	None	"
375	Stewart, Long & Co.....	Chesaning.....	Heading.....	50	50	10	26	10	1 34	St'm.	No
376	W. C. Legg & Co.....	"	Crushed st'ne	8	1	10	26	12	1 50	Gas'ine	"
377	Argus Pub. House.....	"	Newsp'r's, etc.....	5	4	10	26	12	1 50	Gas'ine	"
378	Chesaning Electric Works.....	"	Water.....	3	3	24	30	12	1 67	St'm.	No
379	Chesaning Mills.....	"	Flour.....	5	4	12	26	12	1 75	Wat'r	"
380	Church's Mill.....	"	Lumber.....	13	4	10	26	12	1 50	St'm.	No
381	Chesaning Grain Elevator.....	"	Produce.....	13	3	10	26	12	1 75	"	"
382	Owosso Coal Co.....	Owosso.....	Coal.....	10	10	24	30	12	1 90	"	"
383	Corunna Coal Co.....	"	"	10	10	24	30	12	2 10	"	Yes
384	Geo. Rogi.....	"	Clothing.....	4	2	10	26	12	1 50	None	"
385	J. H. Copas.....	"	Meat packing	12	12	10	26	12	1 71	St'm.	No
386	T. V. Case.....	"	Clothing.....	6	6	10	26	12	1 50	None	"
387	Central Mich. Printing Co.....	"	Printing.....	3	3	10	26	12	1 52	Elec.	"
388	W. H. Mumby.....	"	Cigars.....	3	3	8	26	12	1 67	None	"
389	C. H. Grahame.....	"	"	6	4	8	26	12	1 88	"	"
390	J. Soloman.....	Kirby.....	Feed, etc.....	5	5	10	26	7	1 40	St'm.	No
391	Vernon Grist Mill.....	Vernon.....	"	3	2	10	26	12	1 75	"	"
392	The Vernon Cheese Factory.....	"	Cheese.....	3	2	9	26	7	2 00	"	"
393	Vernon Cooperage Co.....	"	Heading.....	18	18	10	26	12	1 96	"	"
394	The Michigan Milling Co.....	"	Produce.....	12	2	10	26	12	1 75	Gas'ine	"
395	Gardener, Peterman & Co.....	Twining.....	Staves, etc.....	54	54	10	26	10	1 48	St'm.	No
396	John McCready.....	"	Lumber.....	18	16	10	26	8	1 87	"	"
397	Albert Farmington.....	"	Shingles.....	10	7	10	26	11	2 00	"	"
398	The Twining Record.....	"	Newsp'r's, etc.....	2	2	10	26	12	1 50	None	"
399	Creasant Cooperage Co.....	Turner.....	Lumber.....	40	38	10	26	7	1 60	St'm.	No
400	Chicago Creamery Package Co.....	"	Hoops.....	21	21	10	26	12	1 96	None	"

* Running day and night.

° Running 7 days per week.

° Running over 10 hours per day.

Inspection Book No. 9.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. 1 for idle.		Number hours running per day.	Average number days per month.		Average number months per year.		Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
401	M. H. Eymer.....	Turner.....	Staves, etc.....	12	12	10	26	6					\$1 58	St'm.	No
402	G. D. Armstrong.....	"	Shingles.....	11	1										
403	Kern Manufacturing Co.....	West Bay City.	Lumber.....	108	100	10	26	10					1 75	St'm.	No
404	West Bay City News.....	"	Newsp'rs, etc.....	8	8	10	26	12					1 50	Elec.	No
405	Empire Electric Laundry.....	"	Laundry.....	15	15	10	26	12					1 20	E & S	No
406	L. H. Walker.....	"	Confection'ry.....	2	2	10	26	12					2 00	St'm.	"
407	Geo. Chamberlain.....	"	Harnesses.....	3	2	10	26	12					1 50	None	"
408	Sam W. Petri.....	"	Printing.....	3	2	9	26	12					2 00	"	"
409	Julius Kuss.....	"	Clothing.....	4	3	10	26	12					3 00	"	"
410	Standard Hoop Co.....	"	Hoops.....	70	70	10	26	11					1 43	St'm.	No
411	Russell Bros.....	"	Box shoooks.....	11	1										
412	Hine & Co.....	"	Lumber, etc.....	40	40	10	26	3					1 88	St'm.	No
413	W. D. Young & Co.....	"	Flooring.....	50	50	10	26	12					2 60	"	"
414	Kolb Bros.....	"	Beer.....	12	12	10	26	12					2 50	"	"
415	Phoenix Brewing Co.....	"	".....	14	19	10	26	12					2 28	"	Yes
416	Wm. Goldie.....	"	Hoops.....	65	65	10	26	12					2 08	"	No
417	Jas. Davidson.....	"	Ship building.....	1600	600	10	26	12					2 16	"	"
418	Crump Manufacturing Co.....	"	Box shoooks.....	75	75	10	26	11					1 00	"	"
419	Handy Bros.....	"	".....	250	250	10	26	12					1 50	"	"
420	The B. C.'s Con. St. R. W. Co.'s P. House..	"	Electricity.....	34	34	a 24	o 30	12					1 41	"	"
421	Crane & Co.....	"	Lumber, etc.....	20	20	10	26	12					2 50	"	"
422	W. B. C. Water and Elec. Lt. Co.	"	Water, etc.....	15	15	a 24	o 30	12					2 67	"	"
423	John G. Frank.....	"	Feed, etc.....	10	10	a 24	26	12					1 80	"	"
424	Fred Adler.....	"	Cigars.....	7	7	8	26	12					2 14	None	"
425	W. J. Fisk & Co.....	"	".....	14	14	8	26	12					1 78	"	"
426	Wm. Gregory.....	"	Monuments.....	3	3	10	26	12					2 33	"	"
427	Excelsior Foundry.....	"	Castings.....	24	24	10	26	12					2 68	Gasoline	"
428	Moses Howe.....	"	Lumber, etc.....	10	10	10	26	9					1 50	St'm.	No
429	Small & Crane.....	"	Sash, etc.....	22	1										"
430	Barnet's Sail & Awning Factory.	"	Sails, ".....	10	3	10	26	12					1 67	None	"
431	John J. Flood.....	"	Lumber.....	70	70	a 12	26	11					1 33	St'm.	No
432	Michigan Baking Co.....	"	Crackers, etc.....	20	1										"
433	American Ship Building Co.....	"	Ship building.....	1200	1200	10	26	10					1 83	St'm.	No
434	Bradley, Miller & Co.....	"	Lumber, etc.....	150	150	10	26	11					1 15	"	"
435	Saginaw Bay Fish Co.....	"	Fish.....	30	30	10	26	12					2 00	None	"
436	Bentel Cooperage and Woodenware Co.....	"	Woodenware.....	85	85	10	26	12					2 06	St'm.	No
437	Handy Bros. Mining Co.....	"	Coal.....	14	14	8	26	12					2 00	"	"
438	Wenona Mining Co.....	"	".....	15	15	8	26	12					2 00	"	"
439	Detroit Mills.....	Bay City.....	Lumber, etc.....	130	15	10	26	8					1 47	"	"
440	National Cycle Mfg. Co.....	"	Bicycles.....	136	73	10	26	12					1 51	"	Yes
441	The Michigan Pipe Co.....	"	Pipes.....	40	30	10	26	9					1 50	"	"
442	Vanderbilt Cigar Co.....	"	Cigars.....	8	6	8	26	12					1 50	None	"
443	E. J. Vance Box Co., Ltd.....	"	Box shoooks, etc.....	75	60	10	26	12					1 08	St'm.	No
444	Malworth & Merrill.....	"	Cross arms.....	50	40	9	26	12					1 25	"	"
445	W. R. Rouse.....	"	Lumber, etc.....	85	1										"
446	Jonathan Boyce & Sons.....	"	".....	175	"										"
447	J. R. Hall.....	"	Shingles.....	9	"										"
448	James Davidson Dry Dock.....	"	Repairs.....	100	30	10	26	12					2 50	St'm.	No
449	Creamery Pkg. Mfg. Co.....	"	Hoops.....	22	22	10	26	12					1 60	"	"
450	Bay City Plow Works.....	"	Plows.....	5	3	10	26	10					1 67	"	"

• Running day and night.
 • Running 7 days per week.
 • Running over 10 hours per day.

Inspection Book No. 10.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. 1 for idle.		Number hours running per day.	Average number days per month.		Average number months per year.		Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
451	Bay City Water Works.....	Bay City...	Water.....	4	4	a24	0.30	12	\$3.00	St'm.	No				
452	Eddy, Sheldon & Co.....	"	Box shooks, etc..	69	50	10	26	12	1.40	"	"				
453	Eddy Bros. & Co.....	"	Lumber, "	121	121	10	26	9	1.21	"	"				
454	McEwan Bros.....	"	"	150	1										
455	Julius Dingfelder.....	"	Cigars.....	5	5	8	26	12	2.00	None					
456	Balinski Bros.....	"	Brooms, etc..	4	4	10	26	12	1.25	"					
457	Le Patriote.....	"	Newsp'r, etc.	6	6	9	26	12	1.50	"					
458	W. S. Lange.....	"	Cigars.....	11	11	8	26	12	1.45	"					
459	H. Goldman.....	"	Rags, etc..	8	8	1c	26	12	1.25	"					
460	Binnner Planing Mill.....	"	Box shooks..	45	30	10	26	12	1.50	St'm.	No				
461	Bay City Democrat.....	"	Newsp'r, etc.	8	4	9	26	12	1.62	Elec..					
462	Prawda.....	"	"	3	3	9	26	12	1.17	"					
463	Matthew Lamont.....	"	Sash, etc..	40	40	10	26	12	1.50	St'm.	No				
464	Bay City Elec. Light Works.....	"	Electricity.....	7	7	12	0.30	12	2.21	"					
465	Mich. Shade Roller & Box Co.....	"	Rollers, etc..	65	45	10	26	12	1.22	"					
466	Eureka Manufacturing Co.....	"	Kindling.....	12	6	10	26	12	1.34	"					
467	Carey & Schultz.....	"	Flooring.....	25	25	10	26	12	1.40	"					
468	Bay City Brewing Co.....	"	Beer.....	21	21	10	26	12	1.64	"					
469	Smalley & Woodworth.....	"	Lumber, etc.	65	65	10	26	10	1.85	"					
470	John Arnold.....	"	Bread.....	4	4	10	26	12	1.12	Gas..					
471	John B. Garlock.....	"	Clothing.....	6	6	10	26	12	1.67	None					
472	John P. Oliver.....	"	Turkish bath	3	3	a14	26	12	1.50	St'm.	No				
473	C. E. Rosenberg.....	"	Upholstering	15	15	10	26	12	1.67	Elec..					
474	Shearer Bros.....	"	Elevators, etc	3	3	a12	26	12	1.67	St'm.	No				
475	B. Kramer.....	"	Tailoring.....	22	8	9½	26	12	1.50	None					
476	Bay Cities Con. St. Ry. Elect. Pla't	"	Electricity.....	3	3	10	0.30	6	1.67	St'm.	No				
477	J. Ackerman.....	"	Clothing.....	4	4	10	26	12	1.50	None					
478	Bay City Crystal Water Works.....	"	Water.....	5	5	10	0.30	12	1.60	St'm.	Yes				
479	Graves Shingle Co.....	"	Shingles.....	26	1										
480	William Peters.....	"	Lumber, etc.	100	60	10	26	12	1.83	St'm.	No				
481	James Clements & Son.....	"	Woodwork.....	6	6	10	26	12	2.00	Rent.					
482	Industrial Works.....	"	Machinery.....	400	350	10	26	12	1.97	S & E	No				
483	Bay City Gas Co.....	"	Gas.....	8	8	a12	0.30	12	2.00	St'm.	"				
484	McKinnon Manufacturing Co.....	"	Machinery.....	65	65	10	26	12	2.00	"					
485	Smalley Bros.....	"	"	25	25	10	26	12	2.00	"					
486	H. Goldman.....	"	Rags, etc..	5	3	10	26	12	1.00	None					
487	L. Furman.....	"	Clothing.....	3	3	10	26	12	1.16	"					
488	Bay County Electric Co.....	"	Electricity.....	13	13	a12	26	12	.98	St'm.	Yes				
489	Maier Bros.....	"	Boilers.....	15	8	10	26	12	2.50	None					
490	Robert Wildman.....	"	"	7	1										
491	G. Harris.....	"	Rags, etc..	5	5	10	26	12	1.00	None					
492	William Ward.....	"	Saws.....	4	4	10	26	12	2.00	"					
493	F. E. Bradley.....	"	Lumber, etc.	100	100	10	26	12	1.75	St'm.	No				
494	F. R. Mazloff.....	"	Rags, etc..	8	5	10	26	12	80	None					
495	Bay City Stone Co.....	"	Cut stone.....	18	17	9	26	12	1.82	"					
496	Phoenix Flouring Mills.....	"	Flour, etc..	20	20	a12	26	12	1.75	St'm.	No				
497	S. G. M. Gates, Agent.....	"	Lumber, etc.	70	70	10	26	10	1.71	"					
498	F. P. Young.....	"	Kindling.....	10	10	10	26	12	1.50	"					
499	H. Michelson.....	"	Dyed goods..	5	3	18	26	12	2.17	None					
500	W. M. Levison.....	"	"	3	3	10	26	12	1.67	"					

* Running day and night.

* Running over 10 hours per day.

* Running 7 days per week.

Inspection Book No. 11.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number of employees idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
501	E. Koenig.....	Bay City	Dyed goods...	4	4	10	26 12	1	25	None	....
502	A. W. Morrison.....	"	Harnesses...	5	4	10	26 12	1	75	"	....
503	Pierce & Daniels.....	"	Clothing.....	18	13	10	26 12	1	38	"	....
504	A. F. Mueller.....	"	"	6	6	10	26 12	1	15	"	....
505	Jos. S. Ciesligh.....	"	"	6	6	10	26 12	1	25	"	....
506	C. W. Thornwaite.....	"	Harnesses.....	8	8	10	26 12	1	75	"	....
507	Fraser Home Laundry.....	"	"	8	8	12	30 12	1	25	St'm.	No	
508	Hurley Bros.....	"	Binding.....	10	8	8	26 12	1	25	Gas.	....
509	The Tribune.....	"	Newsp'rs, etc.	22	22	8	26 12	2	18	Elec.	....
510	Gregory Bros.....	"	Printing.....	11	11	8	26 12	2	00	"	....
511	Troy Laundry.....	"	Laundry.....	24	24	10	26 12	1	00	St'm.	No	
512	Bay City Times-Press.....	"	Newsp'rs, etc.	19	19	8	26 12	2	00	"	"	
513	Bay City Steam Laundry.....	"	Laundry.....	8	8	10	26 12	1	12	"	"	
514	Pitts & Co.....	"	Lumber, etc.	135	130	10	26 12	2	15	"	Yes	
515	W. H. Nickless Box Co.....	"	Box shooks...	35	31	10	26 12	1	45	"	No	
516	Bay City Iron Co.....	"	Castings.....	30	20	10	26 12	2	05	"	"	
517	The Great Lakes Brass Foundry.....	"	Supplies.....	6	6	10	26 12	2	00	Gas.	....
518	Bay City Roller Co.....	"	Rollers.....	15	8	10	26 12	2	00	St'm.	No	
519	R. Trombly.....	"	Carbonated drinks	3	3	8	26 12	1	67	"	"	
520	Broomfield & Colvin.....	"	Flour, etc.	7	7	10	26 12	1	71	"	"	
521	Gordon Bicycle Repair Co.....	"	Repairs.....	5	3	10	26 12	1	67	Elec.	....
522	Julius Wilhelm.....	"	Cigars.....	18	11	8	26 12	1	82	None	....
523	Charles Knorpp.....	"	Baked goods...	5	5	10	26 12	1	40	Gas.	....
524	R. Meister.....	"	Metal, etc.	6	6	10	26 12	1	33	None	....
525	B. H. Briscoe & Co.....	"	Box shooks...	42	42	10	26 12	1	43	St'm.	No	
526	Bay Coal Mining Co.....	"	Coal.....	7	7	9	26 12	2	00	"	"	
527	Michigan Mining Co.....	"	"	8	8	10	26 12	2	00	"	"	
528	Wolverine Coal Mine.....	"	"	8	8	9	26 12	2	00	"	"	
529	Monitor Coal & Mining Co.....	"	" etc.	7	7	9	26 12	2	00	"	"	
530	Valley Coal Mining Co.....	"	"	7	7	9	26 12	2	00	"	"	
531	The Grand Laundry.....	"	Laundry.....	9	9	10	26 12	1	00	"	"	
532	Echemeyer & Kamun.....	"	Sash, etc.	35	29	10	26 12	1	90	"	"	
533	Marine Iron Co.....	"	Machinery.....	30	30	10	26 12	1	67	"	"	
534	Boutelle Bros. & Co.....	"	Lime, etc.	8	8	10	26 12	1	50	"	"	
535	J. N. McDonald & Son.....	"	Flour, etc.	20	20	24	26 12	1	75	"	"	
536	North American Chemical Co.....	"	Chemicals.....	297	297	10	26 12	1	52	"	Yes	
537	Bousfield & Co.....	"	Tubs, etc.	300	300	10	26 12	1	33	"	No	
538	Phoenix Laundry.....	"	Laundry.....	17	17	10	26 12	1	06	"	"	
539	M. Garland & Co.....	"	Machinery.....	52	44	10	26 12	2	27	"	"	
540	Campbell, Brown Lumber Co.....	"	Lumber, etc.	45	45	10	26 12	1	67	"	Yes	
541	Garrison Salt Co.....	"	Salt.....	6	6	10	26 12	1	50	"	No	
542	South End Lumber Co.....	"	Lumber, etc.	120	1	10	26 12	1	80	None	....
543	Walter M. Teale.....	"	Clothing.....	16	5	10	26 12	1	00	"	....
544	Geo. H. Downing.....	"	Cigars.....	5	4	8	26 12	2	50	"	....
545	F. W. Schlechte & Sons.....	"	Flour, etc.	4	4	10	26 6	1	00	St'm.	No	
546	Gale & Ramage.....	Tawas City	Woodwork...	6	3	10	26 12	1	67	"	"	
547	Chas. Prescott & Son.....	"	Lumber.....	65	65	10	26 8	1	74	"	"	
548	Union Cooperage Co.....	"	Hoops.....	53	1	10	26 12	2	00	"	....
549	Ottawa Hardwood Co.....	East Tawas	Lumber.....	32	32	10	36 7	1	56	St'm.	No	
550	T. H. Fox & Co.....	"	Staves, etc.	22	14	10	26 8	1	46	"	"	

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 12.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. 1 for idle.		Number hours running per day.		Average number days per month.		Average number months per year.		Average daily wages.		Kind of power used.	If steam, is there low water alarm, and is it in good condition?
551	E. Tawas Elec. Lt. & Power Wks.	East Tawas.	Electricity...	3	3	a24	a30	12		\$1 83	St'm.	Yes					
552	D. Walker & Sons.	"	Machinery...	5	5	10	26	12		1 90	"	No					
553	National Milling Co.	"	Salt, etc.	50	10	10	26	12		1 90	"	"					
554	D. & M. R. R. repair shops.	"	Repairs	72	72	10	26	12		2 00	"	Yes					
555	Ambrose Schill.	"	Cigars.	9	9	8	28	12		1 56	None	....				
556	Tawas Herald.	Tawas City.	Newsp'r, etc.	3	3	10	26	12		1 80	"	....				
557	Kinney Bros.	Alabaster	Lumber	5	3	10	26	5		1 67	St'm.	No					
558	The Alabaster Co.	"	Plaster	175	98	10	26	10		1 55	"	"					
559	Whiting Plum Bakery.	Bay City	Baked goods.	28	28	10	26	12		1 25	"	"					
560	Lewis Mfg. Co.	"	Sash, etc.	20	20	10	26	12		1 60	"	"					
561	E. F. Rouse	"	Heading.	25	15	10	26	12		1 40	"	"					
562	Hitchcock Lumber Co.	"	Lumber, etc.	65	65	10	26	8		1 44	"	"					
563	C. C. Baker Lumber Co.	"	"	100	100	10	26	6		1 65	"	"					
564	E. C. Hargraves.	"	"	70	70	a20	26	9		1 80	"	"					
565	Fitch Chemical Co.	"	Chemicals, "	6	6	10	26	12		1 67	Rent.	....				
566	Bateman & Fox.	"	Cigars.	21	21	8	26	12		1 68	None	....				
567	H. G. Miller.	"	Salt.	14	14	10	26	12		1 61	St'm	No					
568	Bay Mfg. Co.	"	Box shooks.	30	1												
569	G. S. Crampton.	"	Carriages.	7	6	10	26	12		1 67	None	....				
570	Sugar Beet Pub. Co.	"	Printing.	10	10	8	26	12		2 50	Gas'line	....				
571	Bay City Electro Plating Works.	"	Plating.	4	3	10	26	12		1 67	"	....				
572	G. Gassal	"	Dyeing.	3	3	10	26	12		1 83	None	....				
573	A. Irons.	"	Mattresses.	5	3	10	26	12		1 75	"	....				
574	A. W. Michelson.	"	Clothing.	4	4	10	26	12		1 50	"	....				
575	Bay City Knitting Co.	"	Hosiery.	30	30	9	26	12		1 07	Elec.	....				
576	L. R. Russell.	"	Mattresses, etc.	11	11	10	26	12		1 28	Gas.	....				
577	C. Mange	"	Cigars	6	4	8	26	12		1 50	None	....				
578	Hardig & Bellamy.	"	Printing.	4	4	9	26	12		2 00	"	....				
579	E. T. Carrington.	"	Elevators, etc	4	4	a12	a30	12		1 62	S & E	No					
580	Crapo Block.	"	Grain.	3	3	a16	a30	12		1 67	St'm.	Yes					
581	A. C. Mass.	"	Clothing.	8	6	10	26	12		1 17	None	....				
582	James A. See.	"	Cab making.	10	4	10	26	12		2 00	Gas.	....				
583	R. C. Bally.	"	Pipe fitting.	18	10	10	26	12		1 80	St'm.	No					
584	Le Courier.	"	Newsp'r, etc.	7	7	8	26	12		1 57	None	....				
585	Andrew King.	"	Supplies.	5	5	10	26	12		1 60	"	....				
586	T. B. Donne.	"	Clothing.	5	5	10	26	12		1 40	"	....				
587	Geo. Schindehette.	"	Heating	2	2	a24	a30	12		1 50	St'm.	No					
588	J. A. Playole.	"	Boilers.	9	1												
589	Peninsular Bakery	"	Bread, etc.	6	6	10	26	12		1 67	Gas.	....				
590	G. W. Szyperski.	"	Clothing.	3	3	10	26	12		1 67	None	....				
591	E. Ladouceur.	"	Harnesses.	3	3	10	26	12		1 67	"	....				
592	Meakin's Steam Laundry	"	Laundry.	10	10	10	26	12		1 00	St'm.	No					
593	John A. Grady.	W. Bay City	Cigars.	4	4	8	26	12		1 75	None	....				
594	Robescheck Printing Co.	"	Printing.	5	5	10	26	12		1 10	W'tr	....				
595	A. D. Campbell.	"	Supplies.	8	8	10	26	12		1 75	Gas'line	....				
596	Flanders Saw Mill.	Flanders	Lumber.	10	10	10	26	3		1 70	St'm.	Yes					
597	Gettelson Bros.	Alpena	Cigars.	5	5	8	26	12		1 70	None	....				
598	Davison Shingle Mill.	"	Shingles.	15	1												
599	G. A. Rollison.	"	Hoops.	5	3	10	26	5		1 58	None	....				
600	Wm. Brown & Sons.	"	Lumber.	7	7	10	26	4		1 61	St'm.	No					

• Running day and night.

• Running 7 days per week.

• Running over 10 hours per day.

Inspection Book No. 13.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
601	Brown & Vanness Lumber Co.	Gladwin	Lumber, etc.	14	14	10	26	10	\$1 50	St'm.	No
602	Ed. Jennings Stave Mill.	"	Staves, etc.	20	18	10	26	12	1 50	"	"
603	Garden Bros. Lumber Co.	"	Lumber	15	1	"	"	"	"	"	"
604	Gladwin City Water Works.	"	Water	3	3	24	30	12	1 67	St'm.	No
605	Clark Mable	"	Shingles	14	12	10	26	10	1 54	"	"
606	James McIlvany	"	"	12	12	10	26	10	1 67	"	"
607	Wm. Brown	Estey	Lumber	12	1	"	"	"	"	"	"
608	Estey Heading Mill.	"	Heading	42	18	10	26	9	1 67	St'm.	No
609	B. Bogine	Highwood	Shingles	9	9	10	26	6	1 67	"	"
610	Saginaw Salt and Lumber Co.	Crow Island	Lumber, etc.	180	150	10	26	8	1 57	"	"
611	J. D. Curtice & Son	Coleman	Staves, etc.	60	60	10	26	12	1 58	"	"
612	Mason & Luke	"	Lumber	5	5	10	26	6	1 80	"	"
613	C. W. Moore	"	Hoops	4	2	10	26	5	1 75	None	"
614	Coleman Independent	"	Newsp'rs, etc.	3	3	10	26	12	1 67	"	"
615	George Cooper	"	Shingles	12	12	10	26	7	1 83	St'm.	Yes
616	Knapp & Cole	"	Heading	30	20	10	26	10	1 40	"	No
617	Michigan Heading and Hoop Co.	"	" etc.	50	1	"	"	"	"	"	"
618	W. B. Ford	Beaverton	Staves	21	21	10	26	4	1 84	St'm.	No
619	Doan & Carpenter	"	Lumber	5	4	10	26	6	1 50	"	"
620	Ross Bros.	"	Shingles	30	30	10	26	8	1 83	"	Yes
621	"	"	Lumber	23	23	10	26	7	1 75	"	No
622	L. W. Quinn & Co.	"	Staves	40	40	9	26	10	1 38	"	"
623	S. A. Price	"	Lumber	20	20	10	26	6	1 75	"	"
624	H. C. Miles	"	"	6	6	10	26	4	1 58	"	"
625	Beaverton Illuminating Co.	"	Electricity	2	2	7	30	12	1 50	"	"
626	W. L. Wiggins Lumber Co.	Sanford	Lumber	27	24	10	26	12	1 60	"	"
627	Bliss & Fowles	"	Shingles	14	14	10	26	11	1 79	"	"
628	Midland Foundry & Mach. Shop.	Midland	Machinery	5	3	10	26	12	2 00	"	"
629	Wm. Patrick Lumber Co.	"	Lumber, etc.	35	30	10	26	12	1 60	"	"
630	" Salt and Bromine	"	Salt, etc.	10	10	10	26	12	1 90	"	"
631	Tittabawassee Flour Mills.	"	Flour, etc.	5	4	12	26	12	1 75	"	"
632	R. T. Lombard	"	Lumber	10	10	10	26	10	1 80	"	"
633	Reardon Bros. Mercantile Co.	"	Beans	12	5	10	26	12	1 60	"	Yes
634	Midland Heading Mill Co.	"	Heading	20	20	10	26	12	1 65	"	"
635	Albert Dickie	"	Salt	8	7	24	26	12	1 56	"	No
636	The Stave Mills.	"	Flour, etc.	7	7	10	26	12	1 64	"	Yes
637	Chas. Brown	"	Lumber	8	4	10	26	10	1 75	"	No
638	Dow Chemical Co.	"	Bleach	100	100	24	30	12	1 60	"	Yes
639	Wm. L. Baker	"	Harnesses	4	4	10	26	12	1 62	None	"
640	Midland Mineral Spring Co.	"	Water	5	5	10	26	12	1 60	Wind	"
641	The Midland Sun	"	Newsp'rs, etc.	3	3	10	26	12	1 67	Gas'ine	"
642	Midland Electric Light Works.	"	Electricity	3	3	24	30	12	2 00	Rent.	"
643	W. P. Sheppard	"	Shingles	9	1	"	"	"	"	"	"
644	K. Neill	"	Heading	8	8	10	26	11	1 62	St'm.	No
645	Wm. L. Baker	"	Beans	12	6	10	26	12	1 58	"	"
646	Midland Republican	"	Newsp'rs, etc.	6	6	8	26	12	2 00	Gas'ine	"
647	R. Richardson	"	Carriages	8	6	10	26	12	1 83	None	"
648	Albert Dickey Lumber Co.	"	Lumber	20	1	"	"	"	"	"	"
649	Carty's Palace Steam Laundry	"	Laundry	3	3	10	26	12	1 67	Rent.	"
650	Midland City Water Works.	"	Water	2	2	24	30	12	1 25	St'm.	No

* Running day and night.

° Running 7 days per week.

° Running over 10 hours per day.

Inspection Book No. 14.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
651	T. C. Prouty Co.....	Midland....	Hardware....	50	20	10	26 12	1 75	Rent.	....
652	Midland Chemical Co.....	"	Bromide....	9	9	*24	26 12	1 67	St'm.	No	
653	Dove & Stanton.....	"	Butter tubs..	24	24	10	26 12	1 58	"	Yes	
654	Gray Bros.....	"	Lumber.....	20	20	10	26 10	1 75	"	No	
655	Mack Cascoe.....	"	"	13	13	10	26 11	1 54	"	"	
656	Peter Oswald.....	Hubbard...	"	15	15	10	26 10	1 67	"	"	
657	The Black Pearl Mine.....	St. Charles.	Coal.....	13	13	10	26 12	1 87	"	"	
658	St. Charles Coal Co.....	"	"	6	6	10	26 12	2 17	"	"	
659	Robert Gage Coal Co.....	"	"	12	12	10	26 12	1 16	"	"	
660	Somers Mine No. 1.....	"	"	6	6	10	26 12	2 10	"	"	
661	" " " 2.....	"	"	10	5	8	26 12	2 10	"	"	
662	William Doty.....	"	Lumber.....	5	5	10	26 10	1 60	"	"	
663	Tonsch & Loeffelstein.....	"	Dressed lum.	4	4	10	26 12	1 62	"	"	
664	F. K. Farmlee.....	"	Flour, etc....	3	3	10	26 12	1 67	"	"	
665	St. Charles Laundry.....	"	Laundry.....	3	3	10	26 12	1 33	None	....
666	St. Charles Union.....	"	Newsp'r's, etc.	3	2	10	26 12	1 50	"	....
667	Henry Ledeau.....	Laingsburg	Feed, etc....	3	3	10	26 12	1 50	St'm.	No	
668	Lawler & Platt.....	"	Flour, etc....	6	3	10	26 12	2 00	"	"	
669	T. K. Salisbury.....	Corunna....	Boots.....	30	12	10	26 12	1 92	Elec.	....
670	Corunna Flour Mills.....	"	Flour, etc....	3	3	10	26 12	1 50	W't'r.	....
671	The Courier Journal.....	"	Newsp'r's, etc.	4	4	10	26 12	1 75	Elec.	....
672	The Corunna Independent.....	"	"	3	3	10	26 12	1 42	None	....
673	Fox & Mason.....	"	Furniture....	102	99	10	26 12	1 18	St'm.	No	
674	Saginaw Mining Co.....	Saginaw....	Coal.....	13	13	8	26 12	2 04	"	Yes	
675	Pere Marquette Mine No. 1.....	"	"	8	8	9	26 12	2 10	"	"	
676	" " " " 2.....	"	"	12	12	9	26 12	2 10	"	"	
677	Standard Mining Co.....	"	"	11	11	8	26 12	2 10	"	No	
678	American Paper Box Co.....	"	Boxes.....	14	4	10	26 12	1 00	None	....
679	C. S. Bliss & Co.....	"	Lumber, etc..	50	45	10	26 9	1 48	St'm.	No	
680	" " " " ".....	"	Dressed lum.	5	5	10	26 12	1 70	Rent.	....
681	C. Merrill & Co.....	"	Salt.....	10	10	*24	26 12	2 10	"	....
682	" " " " ".....	"	Salt barrels..	5	5	10	26 10	1 80	None	....
683	" " " " ".....	"	Lumber.....	120	100	10	26 7	1 75	St'm.	No	
684	Central Lumber Co.....	"	" etc.....	95	95	10	26 7	1 47	"	....
685	West Side Marble Works.....	"	Cut stone....	10	10	9	26 12	2 10	None	....
686	National Salt Co.....	"	Salt.....	16	16	10	*30 7	1 50	St'm.	No	
687	Stoecker Bros. & Co.....	"	Tools.....	6	6	10	26 12	2 00	"	Yes	
688	C. K. Eddy.....	"	Lumber, etc..	150	1	....	....	....	....	....
689	Gaffney Bros.....	"	Monuments..	4	4	9	26 12	2 00	None	....
690	Brewer Lumber Co.....	"	Box shooks, etc.	150	93	10	26 12	1 23	St'm.	Yes	
691	W. B. Mershon & Co.....	"	" " " " ".....	400	375	10	26 12	1 00	"	"	
692	Mich. Wheelbarrow & Truck Co.	"	Trucks.....	100	40	10	26 12	1 62	"	No	
693	Independent Chemical Co.....	"	Wood alcohol	19	19	*24	*30 12	1 68	"	"	
694	Saginaw Valley Traction Co.....	"	Electricity....	45	45	*18	*30 12	2 00	"	Yes	
695	A. T. Bliss.....	"	Lumber.....	80	20	10	26 11	1 55	"	No	
696	Grant Lumber & Salt Co.....	"	" etc.....	75	15	10	26 10	1 67	"	"	
697	Thomas Beamish.....	N. Bradley.	" " " " ".....	22	22	10	26 11	1 68	"	"	
698	Charles Sherman Lumber Co.....	Gilford....	" " " " ".....	10	10	10	26 7	1 60	"	"	
699	Fairgrove Creamery.....	Fairgrove..	Butter.....	3	3	8	26 12	1 33	Gas'ine	....
700	Fairgrove Roller Mill.....	"	Flour, ".....	4	4	*12	26 12	1 75	St'm.	No	

* Running day and night.
 ° Running 7 days per week.
 u Running over 10 hours per day.

Inspection Book No. 15.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
701	F. H. Richardson.....	Fairgrove..	Produce.....	14	4	10	26	12	\$1 50	Gas'ne	....
702	Fairgrove Enterprise.....	"	Newsp'rs, etc.	3	3	8	26	12	1 33	Hand	....
703	James R. Green Lumber Co.	"	Lumber.....	8	2	10	26	8	1 66	St'm.	No
704	Cass Truax Lumber & Shingle Co.	Akron.....	" etc.....	20	12	10	26	8	1 63	"	....
705	Clarence Mallory.....	"	"	4	4	10	26	6	1 75	Rent.	....
706	Liken & Bach.....	"	Staves, etc.	38	38	10	26	7	1 26	St'm.	No
707	Akron Harness Factory.....	"	Harnesses.....	6	6	10	16	12	1 83	Hand	....
708	Davis Bros. Lumber Co.....	"	Lumber.....	10	9	10	26	10	1 37	St'm.	No
709	Akron Roller Milling Co.....	"	Flour, etc.	3	3	10	26	12	1 67	"	....
710	Akron Cheese Box Factory.....	"	Cheese boxes.	6	5	10	26	7	1 60	"	....
711	J. B. Thompson Cider Mill.....	"	Cider, etc.	4	4	10	26	3	1 25	"	....
712	Akron Argus.....	"	Newsp'rs, etc.	3	3	8	26	12	1 33	Hand	....
713	Emory Cook Lumber Co.....	"	Lumber.....	8	7	10	26	7	1 43	St'm.	No
714	Henry Ainsworth.....	"	"	8	7	10	26	8	1 50	"	....
715	Chas. Sherman Lumber Co.....	"	"	8	2	10	26	7	1 50	"	....
716	Unionville Elevator Co.....	Unionville..	Produce.....	4	3	10	26	12	1 67	Gas'ne	....
717	Wilson Bros. Plaining Mill.....	"	Dressed Lum.	9	6	10	26	12	1 83	St'm.	No
718	Unionville Creamery Co.....	"	Butter, etc.	5	4	8	26	8	1 58	"	....
719	Liken & Bach.....	"	Staves, "	30	20	10	26	6	1 25	"	....
720	Unionville Roller Mill.....	"	Flour, "	4	3	12	26	12	1 54	"	....
721	Standard Coal Co's Mine.....	Sebewaing..	Coal.....	8	8	8	26	12	2 00	"	....
722	Perfection Roller Mill Co.....	"	Flour, etc.	6	6	10	26	12	1 75	"	....
723	Sebewaing Lumber & Mfg. Co....	"	Sash, "	15	13	10	26	10	1 54	"	....
724	" Fish Co.....	"	"	26	12	10	26	8	1 67	None	....
725	Pere Marquette Coal Elevator...	"	Coal.....	3	3	10	26	12	1 67	Gas'ne	....
726	Sebewaing Elevator.....	"	Produce.....	4	4	10	26	12	1 50	"	....
727	Liken & Bach.....	"	Staves, etc.	22	15	10	26	8	1 07	St'm.	No
728	Sebewaing Mac. Shop & Foundry	"	Machinery...	3	3	10	26	12	2 00	"	....
729	The Mining Blade.....	"	Newsp'rs, etc.	3	3	8	26	12	1 67	Hand	....
730	Winter's Planing Mill.....	"	Lumber.....	5	I	....	....	....	....	....	....
731	Gamble's Laundry.....	"	Laundry.....	5	5	10	26	12	1 40	Gas'ne	....
732	Sebewaing Brewery Co.....	"	Beer.....	5	5	10	26	12	2 00	St'm.	No
733	" Lumber Co.....	"	Lumber.....	12	12	10	26	3	1 42	"	....
734	" Brickyard.....	"	Brick, etc.	16	16	10	26	6	1 37	"	....
735	" Marble Works.....	"	Cut stone....	3	3	10	26	12	2 00	None	....
736	Leipprant Bros.....	Pigeon.....	Produce.....	7	3	10	26	12	1 50	Gas'ne	....
737	Pigeon Progress.....	"	Newsp'rs, etc.	4	3	8	26	12	1 67	Hand	....
738	" Foundry & Imp. Wks....	"	Implements..	8	4	10	26	12	1 75	St'm.	No
739	James Livingston & Co.....	"	Flax.....	60	60	10	26	8	1 01	"	....
740	Pigeon Roller Mill.....	"	Flour, etc....	5	3	10	26	12	2 00	"	....
741	Liken & Bach.....	"	Staves, "	35	I	....	....	....	....	....	....
742	Pigeon Cheese Factory.....	"	Cheese.....	5	3	10	26	12	1 33	St'm.	No
743	Leipprandt Elevator.....	"	Produce.....	11	3	10	26	12	1 67	"	....
744	Joseph Schluchter.....	"	"	9	3	10	26	12	1 50	Gas'ne	....
745	Jno. Deibel.....	"	Shingles, etc.	10	6	10	26	12	1 66	St'm.	No
746	Chas. Frost Planing Mill.....	"	Supplies.....	5	5	10	26	12	1 90	Rent.	....
747	Caseville Critic.....	Caseville..	Newsp'rs, etc.	3	3	8	26	12	1 00	Hand	....
748	J. R. Poss.....	"	Flour, etc....	4	4	10	26	12	1 75	St'm.	No
749	Bay Port Mercantile Co.....	Bay Port..	Produce.....	4	4	10	26	12	1 50	Gas'ne	....
750	Ballard Fish Co.....	"	Fish.....	8	5	10	26	12	1 80	None	....

* Running over 10 hours per day.

Inspection Book No. 16.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is in good condition?
751	Bay Port Fish Co.....	Bay Port....	Fish.....	12	6	10	26	8	\$1 67	None	....
752	Liken & Bach.....	Linkville....	Staves, etc....	13	9	10	26	6	1 33	St'm.	No
753	J. N. Holmes Lumber Co.....	"	Lumber.....	15	12	10	26	7	1 50	"	"
754	Bay Port Stone Quarry & Lime Co	Ribble Road	Lime, etc....	35	20	10	26	12	1 25	"	"
755	H. P. Chapin Lumber Co.....	"	Lumber.....	15	10	10	26	8	1 55	"	"
756	E. M. Lewis.....	Millersburg	" etc....	15	15	10	26	12	1 67	"	"
757	J. T. Hamilton & Co.....	"	" " " " " "	14	14	10	26	10	1 64	"	"
758	" " " " " "	"	" " " " " "	11	1	10	26	7	1 50	"	"
759	Mitchell & Co.....	"	" " " " " "	30	30	10	26	7	1 67	St'm.	No
760	Fred Lester.....	"	" " " " " "	16	16	10	26	5	2 19	"	"
761	Austin & Thompson.....	"	Shingles.....	16	1	10	26	12	1 67	"	"
762	Gardener & Peterman.....	"	Staves, etc....	45	35	10	26	11	2 14	St'm.	No
763	Force & Dickinson.....	Onaway.....	" " " " " "	45	45	10	26	10	1 90	"	"
764	" " " " " "	"	" " " " " "	20	20	10	26	7	1 75	"	"
765	Onaway Outlook.....	"	Newsp'r's, etc.	3	3	10	26	12	1 67	None	....
766	Chandler Shingle Mill.....	"	Shingles, etc.	17	15	10	26	10	1 80	St'm.	No
767	Gardener, Peterman & Co.....	"	Staves, etc....	45	45	10	26	12	1 51	"	"
768	" " " " " "	"	" " " " " "	15	15	10	26	9	1 78	"	"
769	Chandler Planing Mill.....	"	Dressed lum.	7	5	10	26	12	1 70	"	"
770	M. Aplin & Co.....	"	Lumber, etc....	8	1	10	26	12	1 33	"	"
771	Onaway Iron Works.....	"	Machinery.....	3	2	10	26	12	2 00	St'm.	No
772	G. E. Kuchle.....	Towers.....	Staves, etc....	46	18	10	26	12	1 81	"	"
773	H. F. Banks.....	"	Lumber.....	15	15	10	26	5	1 60	"	"
774	The Cheboygan Tribune.....	Cheboygan.	Newsp'r's, etc.	5	5	10	26	12	1 90	Elec.	....
775	The McMullen Jones Co.....	"	Printing.....	3	3	10	26	12	1 33	"	"
776	Cheboygan City Water Works....	"	Water.....	3	3	a24	30	12	2 50	St'm.	No
777	M. B. Keeney & Sons.....	"	Seed cleaning	67	15	10	26	12	1 67	"	Yes
778	Cheboygan Mfg. Co.....	"	Sash, etc....	27	17	10	26	12	1 53	"	No
779	" " " " " "	"	Boilers, etc....	20	20	10	26	12	1 95	Elec.	....
780	John Noll.....	"	Cigars.....	5	5	8	26	12	1 40	None	....
781	Mrs. Moloney.....	"	" " " " " "	7	7	8	26	12	1 43	"	"
782	P. J. Plitzki.....	"	Clothing.....	4	4	10	26	12	1 75	"	"
783	Jos. J. Murphy.....	"	Cigars.....	4	4	8	26	12	1 75	"	"
784	H. A. Blake.....	"	Machinery.....	8	8	10	26	12	1 75	St'm.	No
785	D. Quay & Sons.....	"	Shingles.....	20	19	10	26	9	1 58	"	"
786	Star Laundry.....	"	Laundry.....	8	6	10	26	12	84	"	"
787	Cheboygan Brewing & Malt Co.	"	Beer, etc....	11	11	10	26	12	2 30	"	"
788	C. P. Habeling.....	"	Clothing.....	3	3	10	26	12	1 67	None	....
789	Cheboygan Model Laundry.....	"	Laundry.....	7	1	10	26	12	2 00	"	"
790	" " " " " "	"	Lath, etc....	13	13	10	26	8	1 61	Rent.	....
791	" " " " " "	"	Lumber.....	150	150	a20	26	8	1 65	St'm.	No
792	L. Littlejohn.....	"	Shingles.....	14	14	10	26	8	1 57	"	"
793	Hays & McDonald.....	"	" " " " " "	24	12	10	26	7	1 96	"	"
794	Thompson Smith's Sons.....	"	Machinery.....	3	3	10	26	12	2 00	"	"
795	Pelfster & Vogel.....	"	Leather.....	175	175	10	26	12	1 50	"	Yes
796	M. McCarthy.....	"	Lumber.....	32	32	10	26	7	1 56	"	No
797	Harrison & Emory.....	"	" " " " " "	40	1	10	26	12	1 50	"	"
798	W. & A. McArthur Co., Ltd.....	"	" " " " " "	107	32	10	26	4	1 50	W't'r.	....
799	" " " " " "	"	Flour.....	6	6	10	26	12	1 92	"	"
800	" " " " " "	"	Dressed lum..	9	8	10	26	12	2 06	"	"

* Running day and night.
 • Running 7 days per week.

Inspection Book No. 17.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
801	Cheboygan Elec. Lt. & Power Co.	Cheboygan.	Electricity....	5	5	24	30	12	\$2 00	W't'r.	.....
802	Swift & Clark.	"	Lumber, etc..	200	200	20	26	7	1 67	St'm.	No
803	Whitehall Lumber Mill.	"	"	100	1						
804	Pelton & Reid	"	Staves	5	5	10	26	8	1 40	Rent.	.....
805	"	"	Shingles	8	8	10	26	9	1 88	"	.....
806	"	"	Lath, etc.	10	10	10	26	8	1 70	"	.....
807	"	"	Lumber	53	53	10	26	8	1 83	St'm.	No
808	Cheboygan Democrat	"	Newsp'r's, etc.	5	5	10	26	12	1 90	Elec.	.....
809	D. M. Olds	"	Staves	40	40	10	26	6	1 60	St'm.	No
810	Cheboygan Wood Turning Co.	"	Novelties	9	9	10	26	12	1 33	"	.....
811	William Peters Estate	Columbiaville..	Flour, etc.	3	3	10	26	12	1 60	"	"
812	"	"	Lumber	5	5	10	24	3	1 40	"	"
813	Riverside Foundry	"	Machinery	5	5	10	26	12	1 60	"	"
814	Columbiaville Woolen Mills.	"	Wool goods..	125	57	10	26	12	1 05	"	"
815	Columbiaville Elevator	"	Produce	3	3	10	26	12	1 50	Rent.	.....
816	The R. King Lum. & Produce Co.	Lapeer	Lumber, etc..	20	20	10	26	12	1 70	None	.....
817	W. E. Knapman	"	Clothing	5	5	10	26	12	1 40	"	.....
818	F. J. Schlegel	"	Harnesses	5	3	10	26	12	1 66	"	.....
819	Centennial Mills	"	Flour, etc.	4	4	10	26	12	1 50	St'm.	Yes
820	Lapeer Co. Press-Democrat	"	Newsp'r's, etc.	8	8	10	26	12	1 00	"	No
821	Lapeer Handle Factory	"	Handles	7	7	10	26	10	1 43	"	"
822	McDonald Mac. Shop & Foundry	"	Machinery	7	7	10	26	12	2 00	"	"
823	Lapeer Tannery	"	Leather	5	5	10	26	12	1 60	"	"
824	J. A. Hungerford	"	Vehicles	5	5	10	26	12	2 00	None	.....
825	Lapeer Steam Laundry	"	Laundry	5	5	10	26	12	80	St'm.	No
826	Lapeer Clarion	"	Newsp'r's, etc.	10	8	10	26	12	1 25	"	"
827	Lapeer Brewery	"	Beer	4	4	10	26	12	2 00	"	"
828	Lapeer Electric Light Works	"	Electricity	3	3	12	30	12	1 92	"	"
829	Lapeer Water Works	"	Water	3	3	12	30	12	1 67	"	"
830	Tuttle & Burritt	"	Lumber, etc..	15	10	10	26	7	1 80	"	"
831	The Lapeer Mercantile Co.	"	Produce	19	4	10	26	12	85	Gas'ine	.....
832	Lapeer Brick & Tile Works	"	Brick, etc	15	14	10	26	12	1 28	St'm.	No
833	Lapeer Cigar Co.	"	Cigars	7	5	8	26	12	1 80	None	.....
834	R. G. Harts	"	Produce	40	8	10	26	12	1 57	Gas'ine	.....
835	Robert Turnbull	"	Flour, etc.	4	4	10	26	12	1 45	St'm.	No
836	Star Roller Mills	"	"	3	3	10	26	12	1 33	"	Yes
837	Williams & Smith	"	Lumber	11	11	10	26	8	1 64	"	No
838	City Hand Laundry	"	Laundry	6	6	10	26	12	83	None	.....
839	Millington Mills	Millington..	Flour, etc.	3	3	10	26	12	1 67	St'm.	No
840	Woolman Elevator	"	Produce	30	3	10	26	12	1 58	Gas'ine	.....
841	The Sioux City Seed & Nurs'ry Co	"	"	30	10	10	26	12	1 00	"	.....
842	Bostwick & Son	"	Stoves, etc..	35	28	10	26	10	1 25	St'm.	No
843	Lane's Cider Mill	"	Cider	3	3	10	26	3	1 50	"	"
844	F. H. Billiard	"	Lumber, etc.	6	6	10	26	4	1 34	"	"
845	Millington Cheese Factory	"	Cheese	3	3	10	26	7	1 58	"	"
846	Messinger Pub. Co.	"	Printing	4	3	8	26	12	1 00	None	.....
847	Wisconsin Butter & Cheese Fac.	Otter Lake.	Butter, etc..	6	5	10	26	7	1 20	St'm.	No
848	Enterprise Printing Co.	"	Printing	3	3	10	26	12	1 33	None	.....
849	A. P. Frank	"	Castings	10	10	10	26	10	1 80	Rent	.....
850	Cummings & Bathrick	"	Dressed lum.	15	6	10	26	6	1 33	St'm.	No

* Running day and night.
 ° Running 7 days per week.
 ° Running over 10 hours per day.

Inspection Book No. 18.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. If for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
851	R. O. Crump & Son.....	Rosecomm'n	Lumber, etc..	55	55	10	26 11	1 36	St'm.	No	
852	Rosecommon Pumping Station...	"	Water.....	1	1	10	26 12	1 25	"	"	
853	" News.....	"	Newsp'r's, etc.	3	3	10	26 12	1 33	None	"	
854	J. B. Redhead.....	"	Shingles.....	11	11	10	26 4	1 36	St'm.	No	
855	West Branch Electric Works.....	West Bra'ch	Electricity....	3	3	a24	o30 12	1 42	Wat'r	"	
856	Chicago Last & Dye Co.....	"	Last bl'ks, etc	14	14	10	26 4	1 57	St'm.	No	
857	West Branch Milling Co.....	"	Flour.....	3	3	10	26 12	1 33	Wat'r	"	
858	John Tolfree.....	"	Shingles.....	16	16	10	26 12	1 12	St'm.	No	
859	Gale Planing Mill.....	"	Dressed lum..	10	10	10	26 12	1 60	"	Yes	
860	" Lumber Co.....	"	Lumber.....	31	31	a11	26 12	1 46	"	"	
861	W. M. Gryce Planing Mill.....	"	Dressed lum..	6	6	10	26 4	1 42	"	No	
862	Russell Bros.....	"	Box sh'ks, etc	75	60	10	26 10	1 25	"	"	
863	West Branch Brewery.....	"	Beer.....	5	5	10	26 12	1 60	"	"	
864	Grant French.....	"	Shingles.....	12	1						
865	West Branch Cheese Factory.....	"	Cheese.....	3	3	8	26 6	1 16	St'm.	No	
866	Ogemaw Republican.....	"	Newsp'r's, etc.	3	3	10	26 12	1 17	None	"	
867	Pioneer Iron Works.....	"	Machinery....	3	3	10	26 12	2 00	St'm.	No	
868	The Herald Times.....	"	Newsp'r's, etc.	3	2	10	26 12	1 25	None	"	
869	Lewiston Journal.....	Lewiston	"	3	3	10	26 12	1 00	"	"	
870	Michelson Hanson & Co.....	"	Lath, etc.....	136	125	10	26 12	1 44	St'm.	No	
871	" " ".....	"	Dressed lum..	20	20	10	26 12	1 40	"	"	
872	" " Lumber Co.....	Sallings	Lumber, etc..	38	36	10	26 12	1 58	"	Yes	No
873	Richard Hartnell.....	"	"	25	25	10	26 5	1 72	"	"	
874	Crawford Avalanche.....	Grayling	Newsp'r's, etc.	3	2	10	26 12	1 62	None	"	
875	Salling, Hanson & Co.....	"	Dressed lum..	16	16	10	26 12	1 50	St'm.	No	
876	" " ".....	"	Lath.....	12	12	10	26 8	1 42	"	"	
877	" " ".....	"	Lumber.....	30	30	10	26 12	1 60	"	"	
878	" " ".....	"	"	70	40	10	26 12	1 71	"	"	
879	Frank Buell.....	Gaylord	" etc.....	25	25	10	26 7	1 64	"	"	
880	Jackson, Wylie & Co.....	"	Staves, ".....	125	60	10	26 12	1 65	"	"	
881	Gaylord Brick Co.....	"	Brick.....	15	15	10	26 4	1 60	"	"	
882	Dayton Last Block Works.....	"	Last blocks..	75	31	10	26 12	1 58	"	"	
883	Humphrey Bros.....	"	Dressed lum..	5	5	10	26 12	1 95	"	"	
884	Redpichl & Son.....	"	Flour.....	3	3	10	26 12	1 67	"	"	
885	W. B. Petrie.....	"	Laundry.....	4	4	10	26 12	1 12	"	"	
886	Otsego County Herald.....	"	Newsp'r's, etc.	3	3	10	26 12	1 86	None	"	
887	" News.....	"	"	3	3	10	26 12	1 50	"	"	
888	Gaylord Pumping Station.....	"	Water, ".....	3	3	a24	o30 12	1 67	St'm.	No	
889	Lewis Cornwell.....	Trowbridge	Lumber.....	35	35	10	26 12	1 37	"	"	
890	Mitchell & Bleacher.....	"	".....	50	41	10	26 12	1 37	"	"	
891	Olds & Hixon.....	Vanderbilt	Staves.....	34	34	10	26 12	1 65	"	"	
892	Zickgraf Bros.....	"	Lumber.....	10	10	10	26 6	1 63	"	"	
893	Guelph Patent Cask Co.....	Wolverine..	Casks, etc..	55	55	10	26 7	1 64	"	Yes	
894	L. C. Cornwell.....	"	Lumber.....	33	33	a11	26 7	1 70	"	"	
895	J. A. Hsack & Sons.....	"	" etc.....	26	26	10	26 12	1 80	"	No	
896	A. Parks Lumber Co.....	Rondo.....	".....	30	5	10	26 6	1 30	"	"	
897	S. Simons, estate.....	"	Shingles.....	12	1				"	"	
898	G. R. & I. R. R. Pump. Station...	Machine Cy.	Water.....	2	2	a20	o30 12	1 60	St'm.	No	
899	M. C. R. Pumping Station.....	"	".....	1	1	10	o30 12	1 60	"	"	
900	Northern Michigan Turning Wks	"	Turning.....	30	30	10	26 12	1 67	"	"	

- Running day and night.
- Running 7 days per week.
- Running over 10 hours per day.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. If for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
901	Pioneer Brewing Co.....	Alpena.....	Beer.....	5	5	10	26 12		\$2 20	St'm.	Yes
902	Fletcher Paper Co.....	".....	Wood pulp.....	80	79	24	30 12		1 40	"	"
903	Alpena Woolen Mills.....	".....	Wool goods.....	9	9	10	26 12		1 90	"	No
904	" Hide and Leather Co.....	".....	Leather.....	27	27	10	26 12		1 33	Rent.	"
905	Northern Extract Works.....	".....	Hemlock ex..	50	20	10	26 12		1 66	St'm.	No
906	Charles Warren.....	".....	Machinery.....	10	8	10	26 12		2 50	"	Yes
907	Alpena Hoop and Lumber Co.....	".....	Lumber, etc.....	65	60	10	26 8		1 75	"	No
908	Thunder Bay Flour Mill.....	".....	Flour, etc.....	3	3	10	26 12		1 77	Rent.	"
909	James M. Johnston.....	".....	Woodwork.....	15	13	10	26 12		1 54	St'm.	No
910	Samuel Davidson.....	".....	Shingles.....	15	1						
911	F. W. Gilchrist.....	".....	Flooring.....	13	13	10	26 12		1 46	Rent.	"
912	".....	".....	Lath.....	9	9	10	26 9		1 55	"	"
913	".....	".....	Lumber.....	100	87	10	26 9		1 53	St'm.	No
914	Gebhardt Morrow & Co.....	".....	Sash, etc.....	20	15	10	26 12		1 70	"	"
915	Fletcher Paper Co.....	".....	Paper.....	80	80	24	30 12		1 58	"	Yes
916	Geo. N. Fletcher & Sons.....	".....	Lath.....	7	1						
917	".....	".....	Lumber.....	80							
918	Churchill Bros.....	".....	Lumber, etc.....	90	85	10	26 7		2 06	St'm.	No
919	Besser Churchill Co.....	".....	Staves, etc.....	50	40	10	26 8		2 02	"	"
920	Huron Mill.....	".....	Lumber, etc.....	70	70	10	26 12		1 61	"	"
921	Fletcher Paper Co.....	".....	Wood pulp.....	38	38	10	26 12		1 78	W&S	"
922	H. B. Cleveland Hoop Mill.....	".....	Hoops.....	16	16	10	26 4		1 25	St'm.	"
923	F. Richardson.....	".....	Lumber, etc.....	42	42	10	26 7		1 70	"	"
924	Bay Shore Water Pump Station..	".....	Water.....	2	2	24	30 12		2 00	"	"
925	Eales Bros.....	".....	Shingles.....	35	35	10	26 12		1 25	"	"
926	Alpena Dye Works.....	".....	Clothing.....	3	3	10	26 12		1 00	None	"
927	White Eagle Milling Co.....	Posen.....	Flour, etc.....	4	3	10	26 12		1 50	St'm.	No
928	V. D. Vincent.....	".....	Lumber.....	8	3	10	26 12		1 50	"	"
929	Posen Creamery.....	".....	Butter.....	3	1						
930	Vassar Evaporating Works.....	Vassar.....	Fruit drying..	10	10	10	26 5		80	None	"
931	" Steam Laundry.....	".....	Laundry.....	2	2	10	26 12		1 12	St'm.	No
932	Reliance Milling Co.....	".....	Flour, etc.....	6	6	12	26 12		1 50	S&W	"
933	The Vassar Creamery.....	".....	Butter.....	5	3	10	30 12		1 60	St'm.	"
934	City Water Works.....	".....	Water.....	1	1	4	30 12		2 00	"	Yes
935	Woolen Mill.....	".....	Wool, etc.....	20	1	9	30 12		2 00	"	No
936	A. F. Brock.....	".....	Cut stone.....	5	3	10	26 12		1 83	None	"
937	Frank Miller.....	".....	Furniture.....	30	30	10	26 12		1 27	St'm.	No
938	".....	".....	Produce.....	20	4	10	26 12		1 12	"	"
939	".....	".....	Brick, etc.....	30	3	10	26 6		1 75	"	"
940	".....	".....	Lumber, etc.....	10	10	10	26 9		1 70	"	"
941	D. C. Atkins & Co.....	".....	Pumps, ".....	3	2	10	26 12		1 62	"	"
942	Tuscola County Pioneer.....	".....	Printing.....	3	3	10	26 12		1 75	"	"
943	Vassar Times.....	".....	".....	5	3	10	26 12		1 22	"	"
944	The Halstead Co.....	".....	Flour, etc.....	6	5	10	26 12		1 15	"	"
945	Vassar Foundry.....	".....	Machinery.....	12	7	10	26 12		1 60	"	"
946	C. W. McCormick.....	Croswell....	Harnesses.....	4	4	10	26 12		1 62	None	"
947	Wm. Tyler.....	".....	".....	6	4	10	26 12		1 75	"	"
948	Crosswell Butter & Cheese Fac..	".....	Butter, etc.....	3	3	8	26 6		1 67	St'm.	No
949	" Democrat.....	".....	Newsp'rs, etc.	3	3	10	26 12		1 58	None	"
950	" Elec. Lt. & Water W'ks	".....	Water, etc. ..	3	3	14	30 12		1 67	St'm.	No

• Running day and night.

• Running 7 days per week.

• Running over 10 hours per day.

Inspection Book No. 20.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
961	Sanilac Jeffersonian.....	Croswell...	Newsp'r's, etc.	3	3	10	26 12	\$1 67	St'm.	No	
962	Croswell Steam Laundry.....	"	Laundry.....	3	3	10	26 12	83	"	"	
963	Johnson Dafeo.....	"	Produce.....	4	4	10	26 12	1 50	Gas/ine	"	
964	Croswell Brick Co.....	"	Brick.....	16	16	10	26 12	1 37	St'm.	No	
965	James Livingston & Co.....	"	Flax.....	75	25	10	26 10	1 24	"	"	
966	McIntyre Foundry.....	"	Castings.....	3	3	10	26 12	1 67	"	"	
967	Croswell Milling Co.....	"	Flour, etc.....	5	5	12	26 12	1 40	"	"	
968	Quail & Son.....	"	Produce.....	5	5	10	26 12	1 40	Gas/ine	"	
969	C. & G. T. R. R. Car Shops.....	Port Huron	Repairs.....	301	301	9	26 12	1 54	St'm.	Yes	
970	The Davidson-Martyn Mfg. Co...	"	Machinery.....	9	9	10	26 12	2 56	"	No	
961	C. & G. T. R. R. Power Shops....	"	"	425	425	10	26 12	1 53	"	Yes	
962	Bradley Grain Elevator.....	"	Grain.....	20	12	10	26 12	2 42	"	No	
963	Port Huron Water Works.....	"	Water.....	6	6	24	30 12	2 33	"	"	
964	Wilbur F. Godfrey.....	"	Clothing.....	5	4	10	26 12	1 00	None	"	
965	Port Huron Republican.....	"	Newsp'r's, etc.	3	3	10	26 12	1 33	Gas..	"	
966	D. L. Ballentine.....	"	Printing.....	3	3	9	26 12	1 67	"	"	
967	McCormick Harness Co.....	"	Harnesses.....	20	20	10	26 12	1 25	None	"	
968	Troy Steam Laundry.....	"	Laundry.....	36	26	10	26 12	96	St'm.	No	
969	Henry J. Kuhn.....	"	Harnesses.....	5	5	10	26 12	1 80	None	"	
970	John Rudge.....	"	Castings.....	20	10	10	26 12	2 00	St'm.	Yes	
971	Dry Dock Iron Works.....	"	Foundry work	10	10	10	26 12	2 00	"	No	
972	A. M. Wright & Co.....	"	Rollers.....	20	15	10	26 12	2 32	"	"	
973	Gore & Hill.....	"	Laundry.....	12	12	10	26 12	1 00	"	"	
974	William Diehl.....	"	Cigars.....	3	3	8	26 12	2 00	None	"	
975	Michigan Sulphite Fibre Co.....	"	Wood pulp...	150	150	24	30 12	1 26	St'm.	No	
976	C. E. Mueller & Co.....	"	Chicory.....	31	30	24	30 12	1 60	"	"	
977	Stock Lubricating Co.....	"	Oil, etc.....	3	2	10	26 12	1 25	"	"	
978	"	"	Castings.....	3	3	10	26 12	1 83	Rent.	"	
979	F. J. Haynes & Co.....	"	Dressed lum.	16	16	10	26 12	1 88	St'm.	No	
980	F. D. Jenks.....	"	"	4	4	10	26 12	1 75	"	"	
981	W. F. Flannagan.....	"	Cooperage.....	3	2	10	26 12	1 87	None	"	
982	Home Manufacturing Co.....	"	Sash, etc.....	9	9	10	26 12	2 44	St'm.	No	
983	Advance Printing Co.....	"	Printing.....	3	3	9	26 12	1 67	None	"	
984	A. J. Smith.....	"	Cigars.....	7	7	8	26 12	1 71	"	"	
985	Port Huron Times.....	"	Printing.....	16	16	9	26 12	2 06	St'm.	No	
986	Riverside Printing Co.....	"	" etc.....	75	68	9	26 12	1 25	Rent.	"	
987	Harry Opie & Co.....	"	"	3	3	8	26 12	1 33	None	"	
988	Tunnel City Boiler Shops.....	"	Boilers.....	32	1					"	
989	Farmers' Elevator.....	"	Grain.....	3	3	10	26 12	1 42	Elec.	"	
990	McMoran Milling Co.....	"	Flour, etc.....	31	9	10	26 12	1 94	Rent.	"	
991	"	"	Grain.....	22	1					"	
992	Excelsior Elec. Lt. & Power Co..	"	Electricity....	7	7	24	30 12	1 36	St'm.	Yes	
993	Huron Machine Works.....	"	Machinery....	4	4	10	26 12	1 88	Elec.	"	
994	Williams Printing Co.....	"	Printing.....	10	10	9	26 12	2 00	"	"	
995	J. P. Eisenhauer.....	"	Blank books, etc.	6	6	10	26 12	83	"	"	
996	E. W. Ortenburger.....	"	Harnesses....	25	23	10	26 12	1 80	None	"	
997	R. M. Campbell.....	"	Lumber, etc....	20	6	10	26 12	1 42	St'm.	No	
998	Sheldon Carpentering Co.....	"	Sawing.....	8	6	10	26 12	1 83	"	"	
999	Port Huron Mattress Co.....	"	Upholst'g, etc	8	5	10	26 12	1 40	None	"	
1000	The Thompson Woodenware Co...	"	Brooms.....	7	7	10	26 12	1 29	"	"	

a Running day and night.

o Running 7 days per week.

u Running over 10 hours per day.

Inspection Book No. 21.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition ?
1001	The City Steam Laundry.....	Port Huron	Laundry.....	27	27	10	26 12	\$0 70	St'm.	No	
1002	Pt. Huron Marble & Granite Wks	" "	Cut stone	18	18	10	26 12	2 00	None	....
1003	Dunford & Alverson L. Dry Dock	" "	Repairs.....	50	8	10	26 12	2 12	St'm.	No	
1004	" " " " " " U. " " " "	" "	" " " " " "	100	6	10	26 12	2 83	"	"	
1005	Henry Howard, estate.....	" "	Lumber.....	50	46	10	26 9	1 56	"	"	
1006	Stone & Co.....	" "	Dyed goods ..	15	15	10	26 12	1 33	"	"	
1007	Kern Brewing Co.....	" "	Beer.....	30	30	10	26 12	2 00	"	Yes	
1008	Wm. J. Smith.....	" "	Harnesses.....	7	5	10	26 12	1 80	None	....
1009	J. W. Sheldon.....	" "	Cut stone.....	7	7	10	26 12	2 00	"	"	
1010	Riverside Woodworking Co.....	" "	Sash, etc.....	50	1	"	"	"	"	"	
1011	Port Huron Gas Co.....	" "	Gas.....	12	12	a24	o30 12	2 00	St'm.	Yes	
1012	Jas. A. Dart.....	" "	Sheet iron, etc	7	4	10	26 12	2 00	None	....
1013	Pt. Huron Carpet Clean. Works..	" "	Cleaning.....	3	3	10	26 12	1 58	St'm.	No	
1014	Palace Steam Laundry.....	" "	Laundry.....	9	9	10	26 12	72	"	"	
1015	The Herald Pub. Co.....	" "	Newspapers, etc..	18	18	9	26 12	1 40	Elec.	....
1016	Thos. M. Lomasney.....	" "	Clothing.....	9	5	9	26 12	1 50	None	....
1017	Standard Novelty Co.....	" "	Shirts, etc.....	35	35	10	26 12	74	Elec.	....
1018	C. K. Chambers.....	" "	Cigars.....	4	4	8	26 12	2 00	None	....
1019	Herman Cigar Co.....	" "	" " " " " "	4	3	9	26 12	1 67	"	"	
1020	O. E. Harrington.....	" "	Furs.....	25	25	8	26 12	1 12	St'm.	No	
1021	Pt. Huron Engine & Thresher Co	" "	Engines, etc.....	310	301	10	26 12	1 70	"	"	
1022	" " Tunnel Co.....	" "	Water.....	4	a24	o30 12	2 00	"	"	"	
1023	Gruel & Ott.....	" "	Soft drinks.....	4	4	10	26 12	1 50	"	"	
1024	City Elec. Railroad Rep. Shop.....	" "	Repairs.....	16	15	10	26 12	1 93	Elec.	....
1025	Wolverine Floating Dock.....	" "	" " " " " "	40	15	10	26 12	2 25	St'm.	No	
1026	Sanborn Elevator.....	" "	Grain.....	6	6	10	26 12	1 60	"	"	
1027	Grand Trunk Grain Elevator.....	" "	" " " " " "	19	19	10	26 12	1 66	"	"	
1028	American Egg Case Co.....	" "	Cases.....	15	1	"	"	"	"	"	
1029	C. & G. T. R. R. Paint & Var. Wks	" "	Paint, etc.....	4	4	10	26 12	2 25	St'm.	Yes	
1030	A. Johnson.....	" "	Dyeing.....	3	3	10	26 12	1 75	None	....
1031	F. A. Gaddum.....	" "	Cigars.....	8	8	8	26 12	1 56	"	"	
1032	The Jenks Ship Building Co.....	" "	Boilers.....	40	30	10	26 6	2 00	St'm.	No	
1033	" " " " " "	" "	Engines, etc.....	40	40	10	26 12	1 87	"	"	
1034	" " " " " "	" "	Steel ships.....	400	210	10	26 12	1 95	"	"	
1035	T. Molloy.....	" "	Peas.....	11	11	10	26 12	1 64	Elec.	....
1036	Pere Marq. R. R. Repair Shops..	" "	Repairs.....	36	3	10	26 12	1 50	None	....
1037	J. E. Wolfstyn.....	" "	Clothing.....	6	6	10	26 12	1 16	"	"	
1038	Applegate Bros.....	" "	" " " " " "	8	8	10	26 12	1 44	"	"	
1039	Philip McQuade.....	" "	Cigars.....	3	3	8	26 12	1 75	"	"	
1040	C. E. Mudford.....	" "	" " " " " "	15	15	8	26 12	1 53	"	"	
1041	Haslett & Co.....	" "	Clothing.....	7	7	10	26 12	1 43	"	"	
1042	T. L. Killitts.....	" "	Printing.....	4	4	10	26 12	1 50	Elec.	....
1043	H. Ziegenfuss.....	" "	Harnesses.....	3	3	10	26 12	1 75	None	....
1044	Port Huron Plumbing Co.....	" "	Supplies.....	12	12	10	26 12	1 83	"	"	
1045	Marine City Steam Granite W'ks.	" "	Monuments.....	5	5	8	26 12	3 00	St'm.	Yes	
1046	" " " " " "	" "	Water.....	2	2	a24	o30 12	1 62	"	No	
1047	" " " " " "	" "	Machinery.....	12	9	10	26 12	2 00	"	"	
1048	A. Anderson.....	" "	Ships.....	50	1	"	"	"	"	"	
1049	Crescent Steam Laundry.....	" "	Laundry.....	4	4	10	26 12	1 00	St'm.	No	
1050	Lindlow Bros. & Hunger.....	" "	Dressed lum..	30	30	10	26 12	1 77	"	"	

a Running day and night.

o Running 7 days per week.

u Running over 10 hours per day.

Inspection Book No. 22.

Inspection District No. 4.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1051	S. Baker & Sons.....	Marine City	Hoops.....	20	17	10	26	4	\$1 35	St'm.	*
1052	Marine City Roller Mill Co.....	"	Flour & elec.	7	7	10	26	12	1 72	"	No
1053	M. Sicken.....	"	Dressed lum.	33	33	10	26	12	1 52	"	"
1054	Marine City Stave Co.....	"	Salt.....	90	1						
1055	Davidson & Wonsey.....	"	"	70	70	24	30	12	1 72	St'm.	Yes
1056	Fairfield Elevator.....	"	Produce.....	30	20	10	26	12	1 50	Gas'ine	
1057	Marine City Stave Co.....	"	Staves.....	40	40	10	26	12	1 60	St'm.	No
1058	O. M. Quick.....	"	Monuments...	8	6	10	26	12	2 00	None	
1059	Marine City Brewing Co.....	"	Beer.....	3	3	10	26	12	1 83	Gas'ine	
1060	James A. Monn.....	"	Harnesses....	4	3	10	26	12	1 67	None	
1061	F. S. Baker.....	"	Cigars.....	4	4	8	26	12	1 75	"	
1062	O. W. Beeker.....	"	"	4	4	8	26	12	1 88	"	
1063	Globe Printing Co.....	"	Prn'td matt'r	3	3	10	26	12	1 67	Gas'ine	
1064	Enterprise Steam Laundry.....	"	Laundry.....	6	6	10	26	12	1 00	St'm.	No
1065	Marine City Reporter.....	"	Prn'td matt'r	3	3	10	26	12	1 67	Gas'ine	
1066	W. D. Addison.....	"	Harnesses....	6	6	10	26	12	1 67	None	
1067	James Drawe.....	"	Clothing.....	12	12	10	26	12	1 17	"	
1068	Michigan Salt Mfg. Co.....	"	Salt.....	60	60	24	30	12	1 75	St'm.	No
1069	Langell Sons & Co.....	St. Clair....	Shipbuilding.	150	6	10	26	12	2 33	"	
1070	Diamond Crystal Salt Co.....	"	Salt.....	70	66	24	30	12	1 85	"	
1071	Belknap & Philips.....	"	Brick.....	36	36	10	26	7	1 45	"	
1072	Thompson Bros.....	"	Salt.....	60	2	24	30	12	1 50	"	
1073	Rankin-Davidson Milling Co.....	"	Flour & feed.	4	4	10	26	12	1 75	"	
1074	St. Clair Iron Works.....	"	Machinery....	4	4	10	26	12	1 75	"	
1075	St. Clair Republican.....	"	Prn'td matt'r	5	5	10	26	12	1 60	"	
1076	City Laundry.....	"	Laundry.....	5	3	10	26	12	96	None	
1077	A. Eber.....	"	Cigars.....	3	3	8	26	12	2 00	"	
1078	R. Wulff.....	"	Clothing.....	5	3	8	26	12	1 83	"	
1079	Water & Electric Light Works..	"	Water & elec.	3	3	24	30	12	1 83	St'm.	No
1080	N. & E. Mills.....	"	Sash, doors, etc.	16	12	10	26	12	1 42	"	
1081	C. Sheldon.....	"	Leather.....	8	8	10	26	12	1 44	"	
1082	"	"	Brick.....	18	18	10	26	12	1 80	"	
1083	Bad Axe Steam Laundry.....	Bad Axe....	Laundry.....	5	5	10	26	12	1 00	"	
1084	Water & Electric Light Works..	"	Elec. & water	2	2	24	30	12	1 50	"	
1085	Charles Ratson.....	"	Harnesses....	5	3	10	26	12	1 67	None	
1086	Adam Preis.....	"	Clothing.....	4	4	10	26	12	1 75	"	
1087	W. H. Carey & Co.....	"	Produce.....	3	3	10	26	12	1 67	St'm.	No
1088	Horace Warren.....	"	Brick.....	13	13	10	26	12	1 54	"	
1089	Bad Axe Democrat.....	"	Prn'td matt'r	3	3	10	26	12	1 67	Gas'ine	
1090	Wallace Allen.....	"	Monuments...	8	3	10	26	12	2 50	None	
1091	Morgan Maximilian.....	"	Cigars.....	3	3	8	26	12	2 00	"	
1092	Elmer Johnston.....	"	Harnesses....	5	5	10	26	12	1 80	"	
1093	Bad Axe Planing Mill.....	"	Dressed lum.	10	10	10	26	10	1 70	St'm.	No
1094	Huron Valley Mills.....	"	Flour, etc....	4	4	10	26	12	1 50	"	Yes
1095	Bad Axe Machine Shops.....	"	Machinery....	3	3	10	26	12	1 67	"	No
1096	The Bad Axe Foundry Co.....	"	" etc.	3	3	10	26	12	2 00	"	
1097	The Huron Tribune.....	"	Prn'td matt'r	4	4	10	26	12	1 75	Gas'ine	
1098	Harvey Patton.....	"	Harnesses....	4	4	10	26	12	1 69	None	
1099	The Farmers' Elevator.....	"	Produce.....	13	4	10	26	12	1 50	Gas'ine	
1100	Algonac Laundry.....	Algonac....	Laundry.....	6	3	10	26	12	75	None	

* Running day and night.
 • Running 7 days per week.
 • One yes, two no.

Inspection Book No. 23.

Inspection District No. 4.—Concluded.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1101	Algonac Planing Mill.....	Algonac....	Dressed lum..	8	3	10	26	9	\$1 87	St'm.	No
1102	" Courier.....	"	Printed mat'r	3	3	10	26	12	1 50	None	....
1103	" Times.....	"	"	3	3	10	26	12	1 58	"	....
1104	Smith & Sons.....	"	Ship building	130	20	10	20	8	2 25	St'm.	No
1105	Yale Woolen Mills.....	Yale.....	Woolen goods	35	35	10	26	12	2 15	"	"
1106	Thos. Wharton & Co.....	"	Produce.....	12	5	10	26	12	1 55	"	"
1107	Yale Milling Co.....	"	Flour & feed.	4	4	12	26	12	1 58	"	"
1108	F. Currier.....	"	Machinery....	13	1	10	26	12	2 00	"	"
1109	R. H. Menerey.....	"	"	6	6	10	26	12	1 55	"	"
1110	The Gem Laundry.....	"	Laundry.....	3	3	10	26	12	77	None	....
1111	Water & Electric Light Works..	"	Water & light	2	2	a24	a30	12	1 50	St'm.	No
1112	City Laundry.....	"	Laundry.....	4	4	10	26	12	88	None	....
1113	James Livingston & Co.....	"	Flax.....	60	60	10	26	12	1 50	St'm.	No
1114	U. S. Chicory Mills.....	W. Bay City	Chicory.....	25	25	a24	a30	12	1 80	"	Yes
1115	A. B. Benthon.....	Bay City....	Cigars.....	3	3	8	26	12	1 80	None	....
1116	Michigan Sugar Co.....	"	Sugar.....	165	165	a24	a30	4	2 00	St'm.	Yes
1117	Bay City.....	"	"	205	205	a24	a30	4	1 90	"	"
1118	Belgian Chicory Mills.....	"	Chicory.....	55	55	a24	a30	4	1 42	"	"
1119	Mich. State Chicory Mills.....	"	"	20	20	a24	a30	4	1 80	"	"
1120	Caro Machine Works.....	Caro.....	Machinery...	7	7	10	26	12	2 00	"	"
1121	E. Parks.....	"	Flour.....	3	3	10	26	12	1 58	"	No
1122	"	"	Lumber.....	9	3	10	26	12	1 67	"	"
1123	Advertiser.....	"	Printed mat'r	7	7	10	26	12	1 00	Gas..	....
1124	Caro Steam Laundry.....	"	Laundry.....	7	7	10	26	12	1 15	St'm.	No
1125	E. Course.....	"	Clothing.....	4	3	10	26	12	1 33	None	....
1126	Caro Marble Works.....	"	Monments...	3	3	10	26	12	2 00	"	....
1127	Courier.....	"	Printed mat'r	9	9	10	26	12	1 12	Gas..	....
1128	Geo. M. Howell.....	"	Dressed lum..	5	3	10	26	6	1 33	St'm.	No
1129	Geo. Warren.....	"	Brick & tile..	9	I	.....	.....	.....	.....	.....	.....
1130	A. Forbes.....	"	Sash, etc.....	11	6	10	26	12	1 37	St'm.	Yes
1131	Pen. Sugar Refining Co.....	"	Sugar.....	225	225	a24	a30	4	2 22	"	"
1132	Water Works.....	"	Water.....	2	2	a30	12	1 25	"	"	"
1133	F. E. Kelsey & Co.....	"	Produce.....	24	24	10	26	12	63	Gas..	....
1134	M. H. Vaughan.....	"	"	15	I	.....	.....	.....	.....	.....	.....
1135	Light & Power Co.....	"	Electricity....	3	3	10	26	12	1 83	St'm.	Yes
1136	A. P. Bertram.....	Rogers.....	Lumber.....	14	4	10	26	2	1 75	"	No
1137	Hoop & Lumber Co.....	"	Hoops, etc...	20	I	.....	.....	.....	.....	.....	.....
1138	Rogers City Flour Mills.....	"	Flour.....	3	3	10	26	12	1 25	St'm.	No
1139	Paul Bittner.....	"	Beer.....	4	4	10	26	12	1 63	None	....
1140	Advance.....	"	Printed mat'r	4	4	10	26	12	1 44	"	....

a Running day and night.

o Running 7 days per week.

u Running over 10 hours per day.

DEDUCTIONS FROM WORK IN FOURTH DISTRICT.

There were 1,140 factories inspected during the year, which is 307 more than in 1899. Of these, 1,065, or more than 93 per cent, were running at the time of inspection, there being only 75 found idle. The ones running were averaging 10.7 hours per day, 26.3 days per month, and 11.1 months per year. This was slightly in excess of the time worked in 1899.

When running at full capacity they would employ 33,816 persons, an average for each factory of 31.7. At the time of inspection they were employing 24,473 males and 1,557 females, a total of 26,030 employes, which is an average of 24.4 employes for each factory, or an average less full capacity for each factory of 7.3 employes. The females were employed in 280 factories, an average of 5.5 for each factory employing females. There is a decrease, as compared with 1899, of the average number of employes in each factory.

There were 70 factories where children were found at work under 16 years of age, said children numbering 298, or 7.4 for each factory employing children. There is a slight increase in the employment of children as compared with 1899. All children found at work under the age of 14 were immediately ordered discharged.

The average daily pay rolls of the 1,065 factories that were running aggregated \$41,790.40, an average for each factory of \$38.95, or an average daily wage for each employe of \$1.68, an increase over the daily wages of 1899 of 13 cents each. This increase is conspicuous, as it means all classes of laborers employed in factories, male and female, old and young.

These factories had been in operation an average of 12.6 years each, although 383, or about 35 per cent of them, had been established since 1895, the greatest number for any one year being in 1898, when 90 new factories were put in operation. It is thought the present year will also equal that number. Saginaw and the Bay Cities are the great manufacturing centers of this district, although there are many other prominent manufacturing points.

Of the 1,065 factories running, 722, or about 68 per cent, report that business has increased in the past year; 400, or nearly 38 per cent, have invested more capital, and 407, or 38 per cent, are employing more laborers. The outlook for the future is flattering.

In the operation of these factories, 626, or about 60 per cent, use steam power, 47 use electric, 59 use gasoline engines, 14 use water power, 32 rent their power, six use hand power, and 281, or 26 per cent, are factories requiring no power.

Of the 612 factories using steam boilers, only 112 were supplied with low water alarms, and 22 of these were not in good condition. Orders were made by the inspector that all boilers be at once equipped with approved low water alarm devices. The alarms in use covered 18 different devices, the Reliance and the Sims being the leading ones.

Orders for changes were made in 615 factories, but of these 536 were

regarding low water alarms. This leaves only 79 factories where other orders were required from the inspector. All steam boilers are rapidly being equipped with low water alarms.

The accidents reported from this district number 40, which is five more than in 1899, but as more factories were inspected the per cent was less than those reported last year. These accidents occurred in 24 factories and are classified as five fatal, three serious, fifteen severe, and seventeen slight. The percentage of slight and severe accidents, as compared with the fatal and serious, will be noticed. See table of accidents and deductions therefrom on pages following.

CHANGES ORDERED DURING YEAR.

DISTRICT NO. 4.

[The number refers to the inspection number in table.]

- 6.—Separate closet for males.
- 10.—Sworn statement for one boy employed.
- 12.—Blowers for emery and buffing wheels.
- 15.—Handrails for stairways; setscrew heads guarded, and guard for drive pulley and main belt of engine.
- 16.—Rip saw guarded.
- 18.—Sworn statements for all children employed.
- 20.—Separate closets for females.
- 23.—Separate closets for females.
- 46.—Separate closets for females.
- 47.—Guard all belts near floors; automatic gates for all elevator openings; handrails on all stairs, ladders, gangways, platforms and floor openings; setscrew heads and projecting keys removed or covered; enclose all gearings; bars across windows above ground floor of lime house; gratings on all openings in floors used for ventilating; also guards centrifugal machine.
- 49.—Shop cleaned; separate closets provided for females and all put in better sanitary condition.
- 50.—Shop cleaned.
- 63.—Rip saw on second floor, two setscrews on second floor, two setscrews on first floor guarded.
- 72.—Blower on buffing machine.
- 74.—Picking machine guarded, and two separate closets.
- 76.—Rip saw guarded.
- 82.—Separate closet for females.
- 100.—Closets for females so designated.
- 125.—Setscrews in new shop removed from shafting.
- 146.—Belt guarded and shaft protected.
- 149.—Setscrews covered; gearing covered on handrail, and one stairway.
- 158.—Closet for females so marked.
- 169.—Blowers for emery wheels.
- 192.—Alarms on boilers repaired.
- 207.—Alarm on boiler repaired.

- 213.—Alarm on boiler repaired.
- 280.—Guard for rip saw.
- 312.—Setscrews guarded.
- 334.—Alarm on boiler repaired.
- 337.—Rip saws guarded.
- 345.—Alarm on boiler repaired.
- 350.—Guards for two rip saws.
- 397.—Setscrews on shaft guarded, and pulley guarded.
- 403.—Setscrews guarded.
- 414.—Alarm on boiler repaired.
- 421.—Setscrews guarded.
- 450.—Emery wheel guarded.
- 460.—Flywheel of engine guarded, and projection on planing wheel guarded.
- 463.—Three rip saws guarded.
- 476.—Fly wheel on engine guarded.
- 513.—Well hole on elevator guarded.
- 525.—Boy under 14 discharged, and rip saw guarded.
- 532.—Three rip saws guarded.
- 537.—Sworn statements for all children employed.
- 560.—Two rip saws guarded.
- 601.—Sworn statements for all children employed.
- 608.—Sworn statements for all children employed.
- 610.—Sworn statements for all children employed.
- 619.—Sworn statements for all children employed.
- 634.—Sworn statements for all children employed, and main belt guarded.
- 636.—Sworn statements for all children employed.
- 638.—Sworn statements for all children employed.
- 663.—Rip saw guarded.
- 664.—Handrail for stairway, and setscrew guarded.
- 673.—Saw guards kept in position.
- 678.—Another closet for employes.
- 680.—Setscrews guarded or removed.
- 706.—Sworn statements for all children employed, and belt in passage way covered.
- 708.—Main belt back of engine guarded.
- 709.—Fly wheel guarded.
- 717.—Remove or cover two setscrews.
- 719.—Sworn statements for all children employed.
- 739.—Setscrews on shaft guarded, and handrail on stairs.
- 740.—Flywheel guarded, and handrail for stairs.
- 763.—Key on shaft guarded.
- 766.—Main belt in engine room guarded.
- 768.—Setscrews removed.
- 769.—Rip saw guarded.
- 777.—Automatic gates for elevator on lower floor.
- 787.—Handrail for engine room stairway.
- 842.—Handrail on stairway, and dust conveyor for two emery wheels.
- 845.—Handrail on stairway.
- 872.—Sworn statement for one boy employed.
- 892.—Rip saw guarded.
- 927.—Handrails for stairs and setscrews removed or guarded.
- 928.—Setscrews removed or guarded.

- 957.—Handrail for stairs.
 1038.—Separate closet for females.
 1057.—Sworn statements for all children employed.
 1067.—Separate closet for females.
 1073.—Repair alarm on boiler.
 1079.—Extend guardrail on one belt.
 1084.—Guard around dynamo and belts.
 1094.—Guardrail on stairway.
 1113.—Water column repaired.
 1128.—Rip saw covered.

The numbers below are the factories in which low water alarms were ordered. A reference to the number given in the tables will designate the name of these factories:

11, 15, 16, 38, 41, 42, 43, 44, 45, 51, 52, 56, 57, 62, 63, 67, 73, 78, 88, 89, 91, 92, 94, 97, 101, 102, 127, 129, 130, 131, 132, 133, 134, 138, 139, 142, 146, 148, 149, 155, 159, 160, 161, 162, 164, 166, 167, 168, 169, 170, 171, 175, 176, 177, 178, 182, 183, 184, 195, 201, 204, 205, 206, 209, 210, 211, 217, 218, 219, 220, 221, 222, 224, 226, 230, 233, 241, 247, 248, 251, 255, 256, 257, 259, 260, 268, 269, 275, 276, 277, 278, 279, 280, 281, 282, 288, 291, 292, 296, 306, 309, 311, 312, 315, 317, 318, 319, 324, 326, 329, 331, 337, 338, 350, 351, 352, 359, 361, 362, 373, 375, 378, 381, 382, 383, 385, 390, 391, 392, 393, 395, 396, 397, 399, 401, 403, 405, 406, 410, 412, 413, 416, 417, 418, 419, 420, 421, 422, 423, 428, 431, 433, 434, 436, 437, 438, 439, 441, 443, 444, 448, 449, 450, 451, 452, 453, 460, 463, 464, 465, 466, 467, 468, 469, 472, 474, 476, 480, 482, 483, 484, 485, 493, 496, 497, 498, 507, 511, 512, 513, 514, 515, 516, 518, 519, 520, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 545, 546, 547, 549, 550, 551, 552, 553, 557, 558, 559, 560, 561, 562, 563, 564, 567, 579, 583, 587, 592, 600, 601, 602, 604, 605, 606, 607, 608, 609, 610, 611, 612, 616, 618, 619, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 635, 637, 638, 644, 645, 650, 652, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 667, 668, 673, 674, 675, 677, 679, 683, 684, 686, 691, 692, 693, 694, 695, 696, 697, 698, 700, 703, 704, 706, 708, 709, 710, 711, 713, 714, 715, 717, 718, 719, 720, 721, 722, 723, 727, 728, 732, 733, 734, 738, 739, 740, 742, 743, 745, 748, 752, 753, 754, 755, 756, 757, 759, 760, 762, 763, 764, 766, 767, 768, 769, 771, 772, 773, 776, 778, 784, 785, 786, 787, 791, 792, 793, 794, 796, 802, 807, 809, 810, 811, 812, 813, 814, 820, 821, 822, 823, 825, 826, 827, 828, 829, 830, 832, 835, 837, 839, 842, 843, 844, 845, 847, 850, 851, 852, 854, 856, 858, 861, 862, 863, 865, 867, 870, 871, 872, 873, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 888, 889, 890, 891, 892, 894, 895, 896, 898, 899, 900, 903, 905, 907, 909, 913, 914, 918, 919, 920, 921, 922, 923, 924, 925, 927, 928, 931, 932, 933, 935, 937, 939, 940, 941, 944, 945, 948, 950, 952, 954, 955, 956, 957, 960, 962, 963, 968, 971, 972, 973, 975, 976, 977, 979, 980, 982, 985, 992, 997, 998, 1001, 1003, 1004, 1005, 1013, 1014, 1020, 1021, 1022, 1023, 1025, 1026, 1027, 1032, 1033, 1034, 1046, 1047, 1049, 1050, 1051, 1052, 1053, 1057, 1064, 1068, 1069, 1070, 1071, 1072, 1074, 1075, 1079, 1080, 1081, 1082, 1083, 1084, 1087, 1088, 1093, 1095, 1096, 1101, 1104, 1105, 1106, 1107, 1108, 1109, 1111, 1113, 1121, 1122, 1124, 1128, 1129, 1136, 1138.

ACCIDENTS—FOURTH DISTRICT

TABLE AND DEDUCTIONS THEREFROM

Inspection District No. 4.

Accidents reported in

No. of factory for 1900.	Name of establishment.	Location.	Date of accident.	Name of person.	Age of person.	Native or foreign born.
43	P. Luther.....	Alpena.....	Nov. 18, 1899..	Fred Gamblin.....	39	For.
43	" ".....	".....	" 1, 1899..	I. R. Hart.....	50	Nat.
43	" ".....	".....	Oct. 18, 1899..	Rufus Hyatt.....	24	"
148	Charles Lee.....	Saginaw.....	Aug. 18, 1899..	C. E. Markhardt..	25	"
159	Palmerton Woodenware Co.....	".....	Nov. 30, 1899..	Arthur Anderson..	15	"
169	Saginaw Manufacturing Co.....	".....	Jan. 19, 1900..	Robert Cole.....	26	"
169	" ".....	".....	May 22, 1899..	W. H. Kramer.....	40	For.
169	" ".....	".....	June 22, 1899..	A. Weiland.....	22	Nat.
169	" ".....	".....	July 26, 1899..	R. Krause.....	18	"
169	" ".....	".....	Aug. 7, 1899..	H. Passalt.....	23	"
169	" ".....	".....	Dec. 22, 1899..	Robert Cole.....	26	"
169	" ".....	".....	" 22, 1899..	G. Clay.....	16	"
177	Steinglein Manufacturing Co.....	".....	Oct. 10, 1899..	Anson Doe.....	22	"
271	Flint Gear and Top Co.....	Flint.....	Nov. 3, 1899..	Andrew McGuire..	30	For.
332	Owosso Handle Factory.....	Owosso.....	Oct. 15, 1899..	Fred Ward.....	30	Nat.
337	" Casket Works.....	".....	Mar. 5, 1900..	F. M. Polman.....	51	"
337	" ".....	".....	" 15, 1900..	Louis Dingler.....	30	"
360	Robins Table Co.....	".....	May 22, 1900..	A. Willoughby.....	42	"
410	Standard Hoop Co.....	West Bay City	" 25, 1900..	Tony Brezeinski..	45	For.
412	Hine & Co.....	".....	" 23, 1900..	Martin Surkowski..	43	"
419	Handy Bros.....	" ".....	June 14, 1900..	Ed. McAuliff.....	17	"
436	Bentel Cooperage & Woodenware Co.....	" ".....	Dec. 16, 1899..	Chas. King.....	17	"
438	" ".....	" ".....	Oct. 30, 1899..	C. Wadialans.....	22	"
610	Saginaw Salt and Lumber Co.....	Saginaw.....	June 28, 1900..	M. Kushback.....	14	"
610	" ".....	".....	Aug. 28, 1899..	John Colpean.....	40	"
620	Ross Bros.....	Beaverton.....	May 15, 1900..	Peter Johnson.....	37	"
638	Dow Chemical Co.....	Midland.....	Oct. 8, 1899..	Wm. Alward.....	45	Nat.
673	Fox & Mason.....	Corunna.....	Aug. 21, 1900..	Wade Courier.....	22	For.
684	Central Lumber Co.....	Saginaw.....	July 10, 1900..	E. Soule.....	16	"
691	W. B. Merashon & Co.....	".....	" 17, 1900..	John Kibbie.....	20	Nat.
691	" ".....	".....	Apr. 11, 1900..	Pate Roman.....	16	For.
691	" ".....	".....	Jan. 16, 1900..	August Berlin.....	18	"
691	" ".....	".....	Sept. 30, 1899..	Ed. Bacon.....	36	Nat.
691	" ".....	".....	Aug. 22, 1900..	John Snyder.....	19	For.
691	" ".....	".....	Sept. 1, 1899..	Herman Gahrle.....	17	"
806	Felton & Reid.....	Cheboygan.....	June 22, 1900..	John Scott.....	15	Nat.
810	Cheboygan Wood Turning Co.....	".....	Sept. 12, 1900..	John Clune.....	40	"
925	Eales Bros.....	Alpena.....	" 26, 1900..	Dan Eiler.....	36	"
928	V. D. Vincent.....	Posen.....	May 25, 1900..	J. Maiken.....	18	"
979	F. J. Haynes & Co.....	Port Huron.....	Nov. 1, 1899..	B. Ford.....	45	"

DEDUCTIONS FROM ACCIDENT TABLE.

Number of accidents reported in 1900.....	40
Number of accidents reported in 1899.....	35
Per cent of accidents in 1900.....	3.7
Per cent of accidents in 1899.....	4.6
Number of fatal accidents in 1900.....	5
Number of fatal accidents in 1899.....	4
Number of serious accidents in 1900.....	3
Number of serious accidents in 1899.....	15

factories inspected in 1900.

Was accident fatal, serious, severe or slight.	Was person married or single.	Cause of accident and nature of injury.	How many days disabled.	Were any wages paid during disability.	Were any benefits received during disability.	Was machinery properly guarded.	Was accident due to carelessness.
Severe...	M	Lost end of thumb; cleaning around saw.....	18	No..	No..	Yes.	Yes.
"	"	Lost finger; caught in pulley	60	"	"	"	"
"	"	Slipped in reaching forward; lost finger.....	28	"	Yes.	"	No.
"	S	Hand slipped; lost part of three fingers.....	8	"	No..	"	"
Slight...	"	Back of hand cut on saw.....	7	"	"	"	Yes.
"	"	Hand jerked into saw; lost three fingers.....	21	"	Yes.	"	No.
Serious...	M	Fell while tightening belt; lost two fingers.....	60	Yes.	"	"	"
Slight...	S	Back of hand cut on saw.....	5	No..	"	"	Yes.
"	"	Cut fingers; placing guard on while in motion.....	12	"	"	No..	"
"	"	Hand slipped; flesh wound on right hand.....	18	"	"	Yes.	"
"	"	Hand slipped; cut cord of first finger.....	18	"	"	"	"
"	"	Hand jerked into knife; cut first finger.....	21	"	"	"	No.
Severe...	"	Lost part of three fingers; removing obstruction from saw.....	21	"	"	"	Yes.
Fatal...	"	Killed; struck by lever.....	"	"	"	"	"
Slight...	M	Mitten caught in saw; cut two fingers.....	14	No..	Yes.	"	"
Severe...	"	Hand jerked into knife; lost part of three fingers.....	42	"	"	"	No.
Slight...	"	Hand slipped; lost end of four fingers.....	7	"	"	"	Yes.
Severe...	"	Lost part of two fingers; hand drawn into saw.....	m	"	No..	"	"
Fatal...	"	Killed; fell on saw.....	"	"	"	"	"
Severe...	"	Hand drawn on saw; lost one finger.....	30	Yes.	Yes.	"	"
"	S	Lost end of two fingers; not looking at saw.....	m	No..	No..	"	"
Slight...	"	Lost part of finger while fooling.....	21	Yes.	Yes.	"	"
Fatal...	"	Killed by blow from machine breaking.....	"	"	"	"	No.
Serious...	"	Lost arm; caught in machine.....	m	Yes.	Yes.	"	Yes.
Fatal...	M	Killed; struck on head from flying bolt.....	"	"	"	"	No.
Severe...	"	Lost thumb by carelessly talking to another.....	21	Yes.	No..	"	Yes.
"	"	Lost three fingers; cleaning machine in motion.....	25	"	Yes.	"	"
Slight...	S	Hand caught in saw; lost end of fingers.....	m	"	"	"	"
"	"	Knee cut; cleaning from saw in motion.....	18	No..	Yes.	"	"
"	"	Hand bruised from flying pulley.....	7	Yes.	"	"	No.
"	"	Flesh wound on thumb; followed board into saw.....	4	No..	"	"	Yes.
Severe...	"	Hand caught in machine; lost three fingers.....	36	Yes.	"	"	"
Slight...	"	Finger broken; drawn under belt.....	21	No..	"	"	"
"	"	Cut over eye by flying machinery.....	m	"	"	"	"
Severe...	"	Foot bruised; caught between elevator and platform.....	60	"	"	"	"
Serious...	"	Lost right foot; slipped on saw.....	m	"	No..	"	"
Severe...	M	Lost thumb and three fingers; taking sliver from saw.....	"	"	"	"	"
Slight...	"	Lost first finger; caught on saw.....	3	No..	No..	"	"
Severe...	S	Lost part of right foot; cause unknown.....	42	"	Yes.	"	"
Fatal...	M	Killed; struck in neck by board flying back.....	"	"	"	"	"

m Disabled at inspection.

Number of severe accidents in 1900..... 15
 Number of severe accidents in 1899..... 13

Number of slight accidents in 1900..... 17
 Number of slight accidents in 1899..... 3
 Average number of days disabled by those injured..... 24

Number who were native born..... 33
 Number who were foreign born..... 17

Number who were married..... 16
 Number who were single..... 24

Number under 21 years of age.....	14
Number under 16 years of age.....	3

Age of oldest person injured, 51 years.

Age of youngest person injured, 14 years.

Average age of all persons injured, 28 years.

Number of persons who received wages during disability.....	8
Number of persons who did not receive wages during disability.....	27

Number of persons who received other benefits during disability.....	24
Number of persons who did not receive other benefits during disability.....	11

Number of factories where machinery was properly guarded.....	39
Number of factories where machinery was not properly guarded.....	1

Number places where accident was due to carelessness.....	32
Number places where accident was not due to carelessness.....	8

Five more accidents are reported than in 1899, but the percentage, as compared with the number of factories, is less than last year. The fatal ones are one more, the serious ones 12 less, the severe ones two more, while those returned as slight are 14 more. Those injured this year report an average of 24 days' disability each.

The average age of those injured this year was 28 years, while the average of those injured last year was 30 years. The oldest person was 51, none others reaching the age of 50 years. The youngest person injured was only 14 years of age.

In 39 of the 40 factories the machinery was reported as properly guarded, while 32 of the 40 accidents was reported as being from carelessness.

Of the 35 accidents not fatal, only eight received wages during the time of disability, and 24 received benefits other than wages. These benefits were in the form of insurance, doctors' bills, etc.

FIFTH DISTRICT,

COMPOSED OF THE COUNTIES

Alger,
Antrim,
Baraga,
Charlevoix,
Chippewa,
Clare,
Delta,
Dickinson,

Emmet,
Gogebic,
Grand Traverse,
Gratiot,
Houghton,
Iron,
Isle Royal,

Isabella,
Kalkaska,
Keweenaw,
Leelanau,
Luce,
Mackinac,
Marquette,

Mecosta,
Menominee,
Missaukee,
Montcalm,
Ontonagon,
Osceola,
Schoolcraft.

WILLIAM MUMMERY,

Deputy Inspector.

REPORT OF WORK IN THE FIFTH DISTRICT.

OFFICE OF DEPUTY FACTORY INSPECTOR, }
Edmore, Michigan, December 1, 1900.

Hon. Joseph L. Cox,

Commissioner of Labor and Chief Factory Inspector, Lansing, Mich.:

Dear Sir—In accordance with your request I hereby submit my second annual report of the work of factory inspection in the fifth district, and take pleasure in being able to report that it has been a very prosperous year for both employer and employe. Labor was never so well employed; wages were never so high, and the condition of the laboring man was never so good in the fifth district as in the past year.

INSPECTION OF FACTORIES.

During the year there has been 875 factories inspected, which is a gain of 125, or 14 per cent, over the number inspected last year. In addition to this, I have re-visited 200 factories, in most of which I found that orders made had been complied with. The number of orders issued were 490, of which 370 were orders for low water alarms.

IDLE FACTORIES.

The percentage of idle factories as compared with the whole number inspected is less than last year. Those that are reported idle, as a rule, were not idle from lack of business, but on account of making repairs, etc.

CHILD LABOR.

As the factories in my district are of that nature that do not employ child labor generally, this section of the law has not been so tedious to enforce as in some other localities. Sworn statements have been made when needed, and in only one or two cases was it necessary to dismiss children under the age of 14 years.

EXHAUST FANS.

Under this section, orders have been complied with in all cases except one, and in this factory work will be commenced some time this winter with a complete exhaust fan system.

DANGEROUS MACHINERY.

This section of the law relating to safeguarding of machinery has always been my constant care to see enforced and all orders complied with, but I regret to say that sometimes the safeguards are taken off by the operators, they saying that they proved an obstacle instead of a safeguard. In using judgment and reason in these cases, I have led the employe to accept the safeguard as a protection to his life and limbs.

LOW WATER ALARMS.

This part of the factory inspection law, although new and somewhat radical, will in time prove a very beneficial law, and is a step in the right direction. Orders have been complied with in nearly all cases, but in their haste to comply with the law certain manufacturers have equipped their boilers with some cheap device that has not and cannot pass inspection. In nearly every case where these make-shifts have been used it has been necessary for me to condemn them for two reasons: First, they would not act with promptness and dispatch after the water had gone below the danger point; and second, they were too easily manipulated by the person in charge.

It seems to me that an amendment to the law should be made, holding the person in charge of the boiler guilty of violating the law when manipulating a low water alarm, and also the person in charge should be held responsible for operating or using a boiler when the low water alarm is not in proper shape.

BOILER EXPLOSIONS.

It has been my duty during the past year to investigate the cause of three boiler explosions in my district. Each of these explosions caused a loss of life that was appalling. In my opinion, after a careful investigation of the facts in each separate case, these explosions could have been prevented had the State had rigid boiler inspection. The safeguarding of machinery has no doubt saved life and limb, and factory inspection has accomplished untold good for the toiling masses, but the most dangerous part of the factory is the boiler, and that is sadly neglected, there being no law to prevent the misuse of the boiler. It seems to me that the question is of too much importance for the legislature to neglect. The wisdom of and the necessity for such legislation cannot be overestimated nor fully appreciated by the people of Michigan, and a law ought to be engrafted on the statute books requiring internal and external inspection.

In my opinion it should be the duty of everyone using steam boilers for driving machinery to use all means at their command to convince the lawmaking body of the incalculable importance of State inspection of steam boilers.

LICENSING ENGINEERS.

Allow me to renew my recommendations on this subject as made in report of last year. Engineers in charge of steam plants should be required to pass an examination as to their qualifications to be employed as such. Examining and licensing engineers need not make an extra expense. On the contrary, it would be a source of revenue to the State by requiring a small fee, which would cheerfully be paid by those competent to pass an examination. Believing boiler inspection and licensing engineers to be the most important amendments that could be made to the factory inspection laws, I look forward with hope that such amendments will be made at no distant day.

Very respectfully,

WILLIAM MUMMERY,
Deputy Inspector.

Inspection Book No. 1.

Inspection District No. 5.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
1	Hand-Made Harness Co.....	Stanton	Harnesses.....	5	5	10	26	12	\$1 50	Hand	....
2	Stanton Cigar Co.....	"	Cigars.....	4	4	9	26	4	1 25	"	....
3	Stanton Elec. Lt. & Power Co....	"	Electricity.....	4	3	24	30	12	1 00	St'm.	No
4	A. C. Middaugh.....	"	Laundry.....	4	2	10	26	12	1 00	Hand	....
5	Montcalm Herald.....	"	Newsp'r's, etc.	4	3	10	26	12	1 11	"	....
6	Stanton Weekly Clipper.....	"	"	5	3	10	26	12	1 10	"	....
7	B. E. Cadwell.....	"	Flour, etc.	9	6	10	26	12	1 16	"	....
8	George F. Case.....	"	Repairs.....	6	6	10	26	12	1 50	St'm.	No
9	Oscar B. Filkins.....	"	Flour, etc.	4	2	10	26	7	1 50	"	....
10	Stanton Boiler Works.....	"	Boilers.....	6	3	10	20	10	2 00	Hand	....
11	C. H. Thompson.....	"	Lumber.....	7	1	....	....	....	....	....	....
12	James W. Willett.....	"	"	16	16	10	20	10	1 00	St'm.	No
13	Alma Roller Mills.....	Alma	Flour, etc.	10	7	10	26	12	2 00	S&W	Yes
14	Alma Elec. Light & Power Co....	"	Electricity...	3	3	24	30	12	1 79	"	....
15	Alma Roller Mills.....	"	Barrels.....	5	2	10	26	12	1 75	Hand	....
16	Alma Sugar Factory.....	"	Beet sugar.....	200	20	24	30	3	1 60	St'm.	Yes
17	Tinker & Hannah.....	"	Dressed lum.	21	1	....	....	....	....	....	....
18	Alma Argus.....	"	Newsp'r's, etc.	4	3	10	26	12	1 66	Hand	....
19	Alma Record.....	"	"	4	4	10	26	12	1 66	W't'r.	....
20	Alma Cycle Co.....	"	Bicycles.....	4	1	....	....	....	....	....	....
21	John C. Bright.....	"	Cigars.....	4	4	....	....	....	....	....	....
22	J. M. Montigel.....	"	Repairs.....	16	10	10	26	12	1 70	St'm.	No
23	Alma Creamery.....	"	Butter.....	10	8	10	26	12	1 50	"	....
24	Wright House Steam Laundry....	"	Laundry.....	6	6	10	26	12	1 29	"	....
25	J. F. Swartz.....	"	Furnaces.....	6	4	10	26	12	2 25	"	Yes
26	Howard City Record.....	Howard City	Newsp'r's, etc.	5	4	10	26	12	1 10	"	No
27	Skinner & Steenman.....	"	Sideboards...	160	160	10	26	12	1 40	"	....
28	Brandebury & Totten.....	"	Tables.....	18	18	10	26	12	1 40	"	....
29	Henry Henkle.....	"	Lumber.....	30	1	....	....	....	....	....	....
30	Howard City Elec. Lt. & P. Co....	"	Electricity...	3	3	20	30	12	1 25	St'm.	No
31	Howard City Water Works.....	"	Water.....	2	2	24	30	2	1 20	"	....
32	A. W. Messenger.....	"	Feed.....	3	2	10	26	1	1 12	Gas.	....
33	Gates & Garmire.....	"	Cigars.....	4	1	....	....	....	....	....	....
34	City Roller Mills.....	"	Flour, etc.	6	4	10	26	12	1 50	St'm.	No
35	St. Louis Milling Co.....	St. Louis...	"	4	4	10	26	12	2 00	Watr	....
36	Ideal Laundry.....	"	Laundry.....	5	4	10	26	12	90	St'm.	Yes
37	Republican-Leader.....	"	Newsp'r's, etc.	6	6	10	26	12	1 00	Gas.	....
38	St. Louis Steam Laundry.....	"	Laundry.....	6	6	10	26	12	1 00	St'm.	No
39	Smith & Becker.....	"	Dressed lum.	6	3	10	26	12	1 25	"	....
40	Robert Wolf & Co.....	"	"	7	7	10	26	12	1 50	"	....
41	Smith & Becker.....	"	Lumber.....	14	10	10	26	5	1 25	"	....
42	M. J. Claggett Co.....	"	Staves.....	58	1	....	....	....	....	....	....
43	"	"	Lumber.....	8	"	....	....	....	....	....	....
44	W. W. H. Smith & Son.....	"	Brick, etc.	15	"	....	....	....	....	....	....
45	Ferrie-Smith Woodenware Co....	"	Staves, etc.	20	11	10	26	7	1 10	St'm.	No
46	St. Louis Bicycle Exchange.....	"	Bicycles.....	4	1	....	....	....	....	....	....
47	Welch A. Green.....	"	Furnaces.....	3	2	10	26	12	1 50	St'm.	No
48	R. D. Phillips.....	"	Carriages.....	4	2	10	26	12	1 50	Hand	....
49	St. Louis Table Works.....	"	Tables.....	4	1	....	....	....	....	....	....
50	Independent.....	"	Newsp'r's, etc.	4	4	10	26	12	1 39	Gas.	....

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 2.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
51	Lakeside Creamery.....	Lakeview..	Butter.....	3	1						
52	Macomber & Bale.....	"	Dressed lum..	18	18	10	26	10	\$1 33	St'm.	No
53	"	"	Lumber.....	1	1						
54	Brown & Cogswell.....	"	Flour, etc....	3	3	10	26	12	1 41	St'm.	Yes
55	Stebbins Mfg. Co.....	"	Furniture.....	65	65	10	26	12	1 23	St'm.	
56	C. M. Northrop.....	"	Produce.....	3	2	10	26	12	1 50	"	"
57	The Lakview Enterprise.....	"	Newsp'rs, etc.	3	3	10	26	12	1 00	St'm.	No
58	A. H. McDonald.....	Six Lakes	Lumber.....	30	30	10	20	7	1 30	"	"
59	Jno. Dalavo.....	Wyman.....	"	25	1						
60	D. B. Sanders & Co.....	Sheridan..	Flour, etc....	4	2	10	26	12	1 50	St'm.	No
61	B. J. Wilson & Co.....	Mecosta...	"	4	2	10	26	12	1 50	"	"
62	Kellogg & Pratt.....	"	Shingles.....	9	6	10	20		1 50	"	"
63	Wm. Hill & Son.....	Millbrook	"	8	6	10	26		1 50	"	"
64	Geo. S. Kent.....	Greenville	Cigars.....	4	3	10	26	12	1 33	None	
65	Marsh & Cowin.....	"	Dressed lum..	6	3	10	26	12	1 50	St'm.	No
66	Ranney Refrigerator Co.....	"	Refrigerators	200	200	10	26	12	1 31	"	Yes
67	"	"	Lumber.....	22	1						
68	Greenville Implement Co.....	"	Plows, etc....	50	50	10	26	12	1 35	St'm.	No
69	" Light & Power Co.....	"	Electricity....	2	2	18	30	12	1 80	W & S	
70	Cass T. Wright.....	"	Flour, etc....	3	3	11	26	12	1 42	W't'r	
71	Wright Bros.....	"	"	4	4	11	26	12	1 60	"	
72	Hand Laundry.....	"	Laundry.....	3	3	10	26	12	1 00	Hand	
73	Greenville Independent.....	"	Newsp'rs, etc.	4	4	10	26	12	2 00	"	
74	Daily Call.....	"	"	4	4	10	26	12	1 50	St'm.	No
75	Greenville Steam Laundry.....	"	Laundry.....	3	3	10	26	12	1 00	"	
76	J. W. Belknap & Son.....	"	Dressed lum..	10	1						
77	Greenville Planter Co.....	"	Planters.....	7	7	8	26	5	1 03	Gas.	
78	Gordon Blast Grate Co.....	"	Repairs.....	26	26	10	26	12	1 75	St'm.	No
79	Bradley Cigar Co.....	"	Cigars.....	22	11	10	26	12	1 50	Elec.	
80	Greenville Water Works.....	"	Water.....	3	2	24	30	12	1 50	St'm.	No
81	E. Middleton.....	"	Flour, etc....	8	8	10	26	12	1 50	Wat'r	
82	H. N. Anderson & Son.....	"	Dressed lum..	6	1						
83	Jno. J. Foster Gas Works.....	"	Gas.....	4	4	24	30	12	1 75	None	Yes
84	F. A. Rockafellow.....	Carson City.	Electricity....	3	3	18	30	12	1 75	St'm.	Yes
85	Rockafellow Grain Co.....	"	Flour, etc....	6	6	10	26	12	1 42	Elec.	
86	Sutherland-Innes Co.....	"	Staves, etc....	44	44	10	26	8	1 70	St'm.	No
87	F. Gunther.....	"	Dressed lum..	4	1						
88	J. Waters.....	"	"	4	1						
89	Carson City Mills.....	"	Flour, etc....	4	3	10	20	12	1 50	Wat'r	
90	" Gazette.....	"	Newsp'rs, etc.	5	5	10	26	12	1 00	Gas.	
91	Brilhart & Selmyer.....	"	Dried fruit...	25	1						
92	Swem & Warren.....	Coral.....	Flour, etc....	4	2	11	20	12	1 50	St'm.	No
93	Coral News.....	"	Newsp'rs, etc.	3	3	10	26	12	97	Hand	
94	Hiram Preston.....	Fenwick.....	Flour, etc....	4	1						
95	The Bannister Cooperage Co.....	Bannister..	Staves, etc....	60	60	10	26	10	1 32	St'm.	No
96	Letts & Gallagher.....	"	Lumber.....	4	2	10	20	6	1 37	"	"
97	C. Chittenden.....	Ashley.....	Staves, etc....	30	20	10	26	10	1 35	"	"
98	A. Starkweather.....	"	Lumber.....	4	3	10	15	6	1 25	"	"
99	Ashley World.....	"	Newsp'rs, etc.	4	3	10	26	12	1 00	Hand	
100	Gordon & Green.....	"	Dressed lum..	3	2	10	20	10	1 50	St'm.	No

• Running day and night.
 • Running 7 days per week.
 • Running over 10 hours per day.

Inspection Book No. 3.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
101	Clark Bros.	Shepherd...	Lumber	27	13	10	20	10	10	\$1 35	St'm.	No
102	Mrs. B. J. White	"	Staves, etc.	35	14	10	26	8	1	23	"	"
103	Shepherd Foundry Co.	"	Repairs	5	5	10	20	12	2	05	"	Yes
104	Isabella County Republican.	"	Newsp'r's, etc.	5	4	10	26	12	1	00	Hand	"
105	The Courier.	Mt. Pleasant	"	6	6	10	26	12	1	25	St'm.	No
106	Whitney & Taylor	"	Hub blocks	30	20	10	26	6	1	56	"	"
107	I. N. Conrad	"	Repairs	5	4	10	26	12	1	80	"	Yes
108	William Bamber	"	Dressed lum.	6	6	10	26	12	1	33	"	No
109	Mt. Pleasant Woollen Mills.	"	Cloth	4	1							
110	Kinch & Gravenstine	"	Laundry	6	3	10	26	12	2	00	St'm.	No
111	The Gorham Bros.	"	Baskets	175	75	10	26	12	1	17	"	Yes
112	Mt. Pleasant Foundry & Plow Co.	"	Staves, etc.	20	20	10	26	10	1	40	"	No
113	Wm. M. Tice	"	Potash	4	2	10	26	4	1	20	Hand	"
114	R. Leonard	"	Barrels	5	5	10	26	10	1	50	"	"
115	L. M. Tiffany	"	Lumber	18	1							
116	M. L. Cole & Co.	"	Dressed lum.	5	3	10	14	10	1	50	St'm.	No
117	Mt. Pleasant Foundry & Plow Co.	"	Plows, etc.	10	5	10	26	12	1	55	Rent.	"
118	Harris Milling Co.	"	Flour, "	9	9	24	26	12	1	51	W't'r.	"
119	Isabella Co. Co-op. Creamery Co.	"	Butter	3	1							
120	Mt. Pleasant Electric Co.	"	Electricity	3	3	10	30	12	1	78	S&W	No
121	Levi Shafer	"	Shingles	14	1							
122	Flint Cigar Co.	"	Cigars	6	3	10	26	12	1	13	Hand	"
123	G. G. Hoyt & Son	Remus	Flour, etc.	4	3	10	26	12	1	50	St'm.	Yes
124	William Crouse	"	Lumber	5	2	10	16	6	1	20	"	No
125	Remus Index	"	Newsp'r's, etc.	3	2	10	26	12	1	00	Hand	"
126	John Hanchett & Bro.	Big Rapids	Saw swages	12	10	10	26	12	2	25	Gas	"
127	Big Rapids Gas Co.	"	Gas	4	3	12	30	12	1	50	"	"
128	Darrah Bros. & Co.	"	Flour, etc.	10	8	11	26	12	1	28	W't'r.	"
129	Upper Falcon Mfg. Co.	"	Specialties	60	56	10	26	12	1	35	St'm.	No
130	Lower Falcon Mfg. Co.	"	"	45	45	10	26	12	1	46	S&W	"
131	Hood & Wright	"	Veneering	60	60	11	26	12	1	40	St'm.	Yes
132	Big Rapids Furniture Co.	"	Furniture	35	27	10	26	12	1	33	W't'r.	"
133	Jones & Green	"	Dressed lum.	16	16	10	26	12	1	44	St'm.	No
134	Lumsden & Ward	"	Lumber	25	25	10	26	8	1	25	"	"
135	Crescent Furniture Co.	"	Furniture	60	35	10	26	12	1	35	"	"
136	Big Rapids D. & B. Mfg. Co.	"	Doors, etc.	60	60	10	26	12	1	33	S&W	Yes
137	Reynolds & Co.	"	Lumber	1	1							
138	D. C. Crawford	"	"	8	"							
139	W. H. Vanderheyden	"	Brick	18	"							
140	E. W. Miller	"	Laundry	7	7	10	26	12	1	00	Hand	"
141	The Big Rapids Herald	"	Newsp'r's, etc.	8	8	10	26	12	1	12	W't'r.	"
142	Gay & Barrows	"	"	10	10	10	26	12	1	30	"	"
143	Theodore Anderson	"	Tinware	4	4	11	26	12	1	70	Hand	"
144	F. C. Lange	"	Clothing	12	12	10	26	12	1	95	"	"
145	City Bakery	"	Baked goods	3	3	10	26	12	1	45	"	"
146	William Batson	"	Tombstones	3	3	10	26	12	2	33	"	"
147	Joseph Feldman	"	Dyed goods	3	2	10	26	12	2	00	"	"
148	Michigan Cigar Co.	"	Cigars	8	8	10	26	12	1	50	"	"
149	Necosta County Mills	"	Flour, etc.	3	3	11	30	12	1	56	W't'r.	"
150	F. W. Joslin	"	Clothing	7	7	10	26	12	1	80	Hand	"

• Running day and night.
 ° Running 7 days per week.
 * Running over 10 hours per day.

Inspection Book No. 4.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
151	Big Rapids Water Works.....	Big Rapids.	Water.....	3	2	24	30	12	\$1 50	S & W	No	
152	City Steam Laundry.....	"	Laundry.....	7	10	26	12	1 03	St'm.	"	"	
153	Middleton Cooperage Co.....	Middleton..	Staves, etc.....	50	40	10	26	12	1 38	"	"	
154	Rockafellow Grain Co.....	"	Flour, ".....	3	2	10	26	12	1 50	"	"	
155	Claude Petit.....	Perrington..	Lumber.....	4	3	10	26	4	1 25	"	"	
156	Fulton Mills.....	"	Flour, etc.....	4	3	10	26	12	1 50	"	"	
157	The Sandusky Cooperage Co.....	North Star.	Staves, ".....	35	20	10	26	12	1 35	"	"	
158	North Star Brick Co.....	"	Brick.....	8	1	"	"	"	"	"	"	
159	Ithaca Steam Laundry.....	Ithaca.....	Laundry.....	5	4	10	26	12	1 05	St'm.	No	
160	Wm. S. Thompson.....	"	Butter tubs..	46	46	10	26	12	1 39	"	Yes	
161	Ithaca Iron Works.....	"	Repairs.....	4	4	10	26	12	1 95	"	No	
162	" Water ".....	"	Water.....	2	1	24	30	12	1 50	"	Yes	
163	" Light & Power Co.....	"	Electricity... 3	2	6	30	12	1 88	"	No		
164	W. T. Naldrett.....	"	Lumber.....	20	15	10	26	10	1 33	"	"	
165	C. W. Althouse.....	"	Staves, etc... 70	60	10	26	12	1 36	"	Yes		
166	Havana Cigar Co.....	"	Cigars.....	12	12	8	26	12	1 46	Hand	....
167	Chas. T. Rogers.....	"	Dressed lum.. 10	4	10	14	12	1 40	St'm.	No		
168	Gratiot County Herald.....	"	Newsp'rs, etc. 7	7	10	26	12	1 25	Gas	....	
169	Ithaca " Journal.....	"	".....	4	4	10	26	12	1 12	"	....
170	Gibbs Bros.....	"	Brick.....	10	1	"	"	"	"	"	....
171	Kirkbride & Co.....	Clare.....	Flour, etc.... 3	3	10	26	12	1 33	St'm.	No		
172	Geo. McKeever & Co.....	"	Shingle.....	8	6	10	26	8	1 66	Rent.	....
173	E. B. Gorr.....	"	Lumber.....	6	6	10	26	12	1 35	St'm.	No	
174	Fred Lister.....	"	".....	20	20	10	26	4	1 35	"	"	
175	A. S. Rhodes & Co.....	"	Staves, etc... 20	20	10	26	12	1 35	"	"	"	
176	Muscott & Palmer.....	"	Hardwood..... 5	4	10	26	"	1 10	"	"	"	
177	The Sentinel.....	"	Newsp'rs, etc. 3	3	10	26	12	1 43	"	"	"	
178	Clare Courier.....	"	".....	4	4	10	26	12	1 40	"	"	
179	C. W. Althouse.....	"	Staves, etc... 56	46	10	26	12	1 40	"	"	"	
180	Clare Foundry.....	"	Plows, "..... 3	2	10	26	12	1 60	"	"	"	
181	A. J. Doherty.....	"	Electricity... 3	3	7	30	12	1 04	"	"	"	
182	Mater Bros.....	"	Dressed lum.. 3	3	10	26	12	1 83	"	"	"	
183	Stanley Bros.....	"	Potash.....	4	1	"	"	"	"	"	"	
184	Harrison Cooperage Co.....	Harrison...	Heading..... 15	15	10	26	2	1 50	St'm.	No		
185	W. H. Wilson & Son.....	"	Lumber.....	27	27	10	26	9	1 30	"	"	
186	Harrison City Water Works.....	"	Water.....	2	1	24	30	12	1 50	"	"	
187	Wilbur Merchant.....	"	Shingle.....	8	7	11	20	7	1 60	"	"	
188	Breckenridge Roller Mills.....	Breckenridge..	Flour, etc.... 4	3	10	26	12	1 78	"	"	"	
189	Geo. Torbert.....	"	Dressed lum.. 7	5	10	20	8	1 55	"	"	"	
190	P. C. Thomas & Co.....	"	Grain.....	2	2	10	26	12	1 50	"	"	
191	J. E. Reiter.....	Sylvester...	Lumber.....	20	1	"	"	"	"	"	"	
192	Hughes Cedar Co.....	Hughes.....	Shingles..... 25	25	10	20	8	1 36	St'm.	No		
193	Lyden, Gagner & Co.....	"	Lumber.....	18	1	"	"	"	"	"	"	
194	National Iron Works.....	Reed City..	Fire escapes. 25	25	10	26	12	1 88	St'm.	No		
195	Wm. Horner.....	"	Flooring..... 30	30	10	26	12	1 13	"	"	"	
196	Amos. Rosenberg.....	"	Lumber.....	30	30	10	26	6	1 33	"	"	
197	Reed City Woolen Mills.....	"	Cloth.....	12	1	"	"	"	"	"	"	
198	Welsh Manufacturing Co.....	"	Boxes, etc.... 42	42	10	26	12	1 33	St'm.	No		
199	abcock Grain Co.....	"	Flour, "..... 4	4	10	26	12	1 60	"	"	"	
200	Lowell Manufacturing Co.....	"	Heading..... 22	22	10	26	12	1 30	"	Yes		

a Running day and night.
 o Running 7 days per week.
 u Running over 10 hours per day.
 * At present.

Inspection Book No. 5.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
201	Wenzell Bros.	Reed City	Shingles.....	25	10	10	26	6	\$1 40	St'm.	Yes
202	H. K. Davis.	"	Cigars	3	3	8	26	12	1 50	Hand	No
203	Reed City Clarion.	"	Newsp'rs, etc.	5	5	10	26	12	1 00	St'm.	No
204	Osceola Democrat.	"	"	3	3	10	26	12	1 15	Hand	No
205	The King Printing Co.	"	"	6	1	"	"	"	"	"	"
206	Reed City Tannery.	"	Hides.	5	"	"	"	"	"	"	"
207	" Creamery.	"	Butter.	3	"	"	"	"	"	"	"
208	Andrews Electric Light Co.	"	Electricity.	3	2	7	30	12	1 30	Wat'r	"
209	Banner Steam Laundry	"	Laundry.	5	5	10	26	12	90	St'm.	"
210	Johnson & West	"	Repairs.	3	2	10	26	12	1 75	"	"
211	W. N. Witherell.	"	Furnaces.	3	2	10	26	12	1 87	Hand	"
212	Fred Scharlow.	"	Bowls	8	1	"	"	"	"	"	"
213	J. H. Gibbs & Son.	Edmore	Flour, etc.	4	3	10	26	12	1 65	St'm.	Yes
214	Edmore Journal.	"	Newsp'rs, etc.	2	2	10	26	12	1 50	"	No
215	" Creamery.	"	Butter.	3	1	"	"	"	"	"	"
216	Fred Collins.	"	Shingles, etc.	20	11	10	26	6	1 45	St'm.	No
217	Edmore City Laundry.	"	Laundry.	3	2	10	26	12	1 00	Hand	"
218	Champion Tool & Handle Works	Evart.	Tools	30	12	10	26	12	1 75	St'm.	No
219	Smith & Bath	"	Flour, etc.	5	3	10	26	12	1 66	"	"
220	C. J. Waffle	"	Dressed lum.	4	2	10	26	12	1 50	"	"
221	Shore Bros.	"	Shingles.	13	13	10	26	12	1 43	"	"
222	Davy & Co.	"	"	12	1	"	"	"	"	"	"
223	J. B. Sleezer.	"	Lumber.	10	"	"	"	"	"	"	"
224	Evart Review.	"	Newsp'rs, etc.	3	2	10	26	12	1 25	Gas.	"
225	J. H. Lamphear.	Sears	Lumber, "	8	1	"	"	"	"	"	"
226	Williams Stave & Heading Co.	Farwell.	Staves, etc.	15	15	10	26	12	1 35	St'm.	No
227	J. L. Littlefield.	"	Lumber.	45	45	10	26	12	1 50	"	"
228	J. W. Updegraff.	"	Shingles.	10	1	"	"	"	"	"	"
229	"	"	Lumber.	7	7	10	26	"	1 45	St'm.	No
230	Geo. W. Graham	"	Handles.	8	8	10	26	7	1 50	"	"
231	Farwell Water Works.	"	Water.	1	1	24	30	12	1 50	"	"
232	" Mills.	"	Flour, etc.	3	2	10	26	12	1 50	Wat'r	"
233	Fred Dunham	Marion	Shingles.	13	13	10	20	10	1 77	St'm.	No
234	A. M. Porter.	"	"	12	12	10	26	10	1 63	"	"
235	Marion Mfg. Co.	"	Hoops, etc.	45	45	10	26	12	1 60	"	"
236	Sherk & Thompson.	"	Flour, etc.	5	5	10	26	12	1 66	Wat'r	No
237	Wm. Dickerson.	"	Lumber.	12	12	10	26	5	1 42	St'm.	No
238	Wagner & Wilson.	"	Shingles.	16	12	10	26	"	1 45	Wat'r	No
239	J. A. Thompson	"	Whip sockets	7	7	10	26	8	1 22	St'm.	No
240	Robinson's Mill	"	Dim'n stock.	4	4	10	20	8	1 25	"	"
241	Orson Deveraux.	"	Shingles.	7	1	"	"	"	"	"	"
242	F. L. Stern.	"	Staves.	25	"	"	"	"	"	"	"
243	Cox Bros.	"	Lumber.	15	"	"	"	"	"	"	"
244	C. Dolph.	Temple	Shingles, etc.	50	50	10	26	10	1 60	St'm.	No
245	C. Baluss.	"	"	12	12	10	20	5	1 58	"	"
246	Dewey Stave Co.	"	" etc.	75	75	10	26	10	1 63	"	"
247	A. McMullen	"	"	12	12	10	26	6	1 50	"	"
248	T. S. Wait & Son	"	Bed slats	16	1	"	"	"	"	"	"
249	Ross Bros. Sapless Blk. Co.	"	Paving blocks	30	"	"	"	"	"	"	"
250	Nowlin Lumber Co.	Clarence	Lumber.	50	"	"	"	"	"	"	"

• Running day and night.
• Running 7 days per week.
* At present.

Inspection Book No. 6.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. I for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
251	Cromwell Lumber Co.....	McBain....	Chair stock....	40	40	10	26	12	\$1 25	St'm.	No
252	" " ".....	"	Dowells.....	12	I	"	"	"	"	"	"
253	Dewey Stave Co.....	"	Staves, etc....	35	35	10	26	12	1 29	St'm.	No
254	H. Holmes.....	"	Lumber.....	12	12	10	26	4	1 50	"	"
255	Maltby Lumber Co.....	"	" etc.....	24	24	10	26	7	1 58	"	"
256	Dan Burket.....	"	Lumber.....	10	10	10	26	6	1 55	"	"
257	Syrm Lumber Co.....	"	"	20	20	*20	26	7	1 75	"	"
258	Spreckle & Taylor.....	"	" etc.....	18	18	10	26	6	1 59	"	"
259	Frank Simmons.....	Lucas	"	18	18	10	26	6	1 56	"	"
260	D. B. Kelly.....	"	Handles.....	24	24	10	26	12	1 54	"	Yes
261	Wells, Higman & Co.....	Trav. City..	Baskets.....	300	220	10	26	8	1 40	"	No
262	William Beitner.....	"	Chair stock....	80	80	10	26	12	1 50	"	"
263	Fulghum Manufacturing Co.....	"	"	60	60	10	26	12	1 50	"	"
264	Straub Bros. & Amiotte.....	"	Candles.....	26	25	10	26	12	1 30	Hand.	"
265	J. E. Greilick.....	"	Dressed lum....	40	40	10	26	12	1 55	St'm.	No
266	Oval Wood Dish Co.....	"	Dishes.....	326	326	10	26	11	1 64	"	"
267	Michigan Starch Co.....	"	Starch, etc....	100	100	10	26	12	1 75	"	Yes
268	Potato Implement Co.....	"	Planters.....	78	19	10	26	7	1 42	"	No
269	Victor Petertyl.....	"	Wagons, etc....	15	15	10	26	12	1 65	"	"
270	Traverse Bay Herald.....	"	Newsp'rs, etc..	16	16	9	26	12	1 66	Elec.	"
271	The Morning Record.....	"	"	11	11	9	26	12	1 63	"	"
272	Hannah, Lay & Co.....	"	Flour, etc....	10	10	*11	26	12	2 20	W't'r	"
273	Jackson Machine Shop.....	"	Repairs.....	3	3	10	26	12	2 16	St'm.	No
274	Traverse City Iron Works.....	"	"	18	18	10	26	12	2 00	"	"
275	Traverse City Wagon Works.....	"	Wagons, etc....	10	8	10	26	12	1 80	"	"
276	John F. Ott & Co.....	"	Lumber.....	26	26	10	26	8	1 68	"	"
277	Michigan Manufacturing Co.....	"	Novelties.....	16	16	10	26	12	1 50	"	"
278	H. D. Campbell.....	"	Electricity.....	8	8	*24	30	12	1 87	"	"
279	Caldwell & Loudon.....	"	Wagons, etc....	18	18	10	26	12	1 68	"	"
280	The Boardman River Electric Co	"	Electricity.....	5	5	*24	30	12	2 00	W't'r	"
281	Eagle Press.....	"	Newsp'rs, etc..	13	13	9	26	12	1 56	Elec.	"
282	A. W. Wait Manufacturing Co.....	"	Dressed lum....	5	I	"	"	"	"	"	"
283	Elmwood Manufacturing Co.....	"	Novelties.....	12	12	10	26	5	1 60	St'm.	No
284	Greilick Bros.....	"	Lumber.....	40	I	"	"	"	"	"	"
285	John Foot & Co.....	"	Hides, etc....	3	"	"	"	"	"	"	"
286	A. W. Jahrus.....	"	Cigars.....	14	14	8	26	12	1 75	Hand	"
287	P. A. Clausen.....	"	"	21	21	8	26	12	1 60	"	"
288	The Register Job Office.....	"	Printing.....	2	2	10	26	12	1 50	St'm.	No
289	Star Steam Laundry.....	"	Laundry.....	14	14	10	26	12	1 50	"	"
290	American Steam Laundry.....	"	"	6	6	10	26	12	1 28	"	"
291	H. E. Gibbs.....	"	Repairs.....	5	5	10	26	12	1 50	Gas.	"
292	Cavin Cigar Co.....	"	Cigars.....	8	8	10	26	12	1 54	Hand	"
293	A. Prashil.....	"	"	3	2	10	26	12	1 55	"	"
294	George W. Lardie.....	"	Produce.....	4	4	10	26	12	1 50	"	"
295	A. Beitner.....	"	Bottling.....	3	3	10	26	12	1 30	"	"
296	N. B. Keeney.....	"	Seeds.....	15	I	"	"	"	"	"	"
297	Plato, Renwick & Co.....	Barryton ..	Lumber.....	40	40	*11	26	7	1 56	St'm.	No
298	"	"	Dressed lum....	6	6	10	26	12	1 42	"	"
299	Barryton Creamery.....	"	Butter.....	4	I	"	"	"	"	"	"
300	Barryton Press.....	"	Newsp'rs, etc..	3	2	10	26	12	1 15	Hand	"

- Running day and night.
- Running 7 days per week.
- Running over 10 hours per day.

Inspection Book No. 7.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
301	Bradley Bros.....	Barryton...	Lumber.....	9	9	10	26	9	\$1 35	St'm.	No
302	Wm. Helmer.....	"	"	9	1	"	"	"	"	"	"
303	Jno. Caswell.....	"	Lath.....	4	3	10	26	3	1 37	St'm.	No
304	Wm. Rector.....	"	Lumber.....	10	10	10	26	7	1 46	"	"
305	Hunt & Son.....	"	"	5	5	10	26	7	1 66	"	"
306	Hawk & Wyman.....	"	"	6	6	10	26	6	1 43	"	"
307	W. J. Shanks.....	"	Flour, etc.....	3	3	10	26	12	1 16	Gas.	"
308	Hildreth & Bair.....	Titus.....	Lumber.....	5	5	10	26	6	1 50	St'm.	No
309	Moore & Blowachine.....	Chippewa Lake.	Shingles.....	10	10	10	26	5	1 60	"	"
310	Ward & Sweet.....	"	Lumber.....	22	22	10	26	12	1 40	"	"
311	L. B. Beghold.....	"	"	23	1	"	"	"	"	"	"
312	Crosby & Collins.....	"	"	50	"	"	"	"	"	"	"
313	"	"	Shingles.....	18	"	"	"	"	"	"	"
314	M. Casper.....	Rodney.....	"	25	"	"	"	"	"	"	"
315	J. Fuller.....	Chatterton..	"	14	14	10	26	8	1 61	St'm.	No
316	H. Rogers.....	Sherman City..	"	12	1	"	"	"	"	"	"
317	Elmer Brooks.....	"	Lumber.....	9	9	10	26	7	1 44	St'm.	No
318	J. S. Weldman.....	Weldman.....	"	70	60	11	26	12	1 53	"	"
319	"	"	Dressed lum.	12	12	11	26	12	1 50	"	"
320	Adams & Acker.....	"	Shingles.....	14	14	10	26	10	1 41	"	"
321	W. J. Beebe.....	"	Dressed lum..	2	2	10	26	3	1 37	"	"
322	Geo. Acker.....	"	Feed.....	3	1	"	"	"	"	"	"
323	S. Hartley.....	LeRoy.....	Feed, etc.....	3	3	10	26	12	1 58	St'm.	No
324	Nelson Bros.....	"	Lumber.....	8	8	10	26	4	1 37	"	No
325	LeRoy Creamery.....	"	Butter.....	4	1	"	"	"	"	"	"
326	Grant & Wilcox.....	"	Lumber.....	15	"	"	"	"	"	"	"
327	P. Gardner.....	"	"	12	12	10	26	7	1 50	St'm.	No
328	E. C. Allen.....	"	"	10	10	10	26	6	1 45	"	"
329	C. A. Warren.....	"	"	12	12	10	26	3	1 50	"	Yes
330	J. L. Crowl.....	Dewings.....	"	16	16	10	26	9	1 36	"	No
331	R. A. Berry.....	Ashton.....	"	10	10	10	26	2	1 45	"	"
332	J. H. Worden.....	Tustin.....	etc.....	35	35	10	26	12	1 54	"	"
333	T. E. Stevens.....	"	"	18	1	"	"	"	"	"	"
334	Tustin Creamery.....	"	Butter.....	3	"	"	"	"	"	"	"
335	A. Hyde.....	Summit City	Lumber.....	15	15	10	26	6	1 53	St'm.	No
336	C. A. Ridlon.....	"	"	25	25	10	26	6	1 68	"	"
337	Case & Crotser.....	Kingsley....	"	25	25	10	26	6	1 56	"	"
338	S. E. Curdy.....	"	"	20	1	"	"	"	"	"	"
339	Wesley Dunn.....	"	"	10	10	10	26	6	1 52	St'm.	No
340	Case & Crotser.....	"	"	10	10	10	26	7	1 54	"	"
341	Estate of J. L. Gibbs.....	Mayfield.....	"	40	40	10	26	8	1 25	"	"
342	"	"	Shingles.....	13	13	10	26	6	1 61	"	"
343	The D. R. Daly Co.....	Suttons Bay	Lumber.....	22	22	10	26	7	1 52	"	"
344	Wm. Loas.....	"	"	5	5	10	26	5	1 50	"	"
345	"	"	Shingles.....	6	5	10	26	6	1 60	"	"
346	L. Mosher.....	Provemont..	Lumber, etc.....	15	15	10	26	7	1 47	"	"
347	Gagnon & Son.....	Northport..	Flour, etc.....	4	3	10	26	12	1 55	S & W	"
348	Northport Lumber Co.....	"	Dressed lum.	5	5	10	26	12	1 52	St'm.	"
349	"	"	Lumber.....	15	15	10	26	7	1 53	"	"
350	Gill & Peck.....	"	Shingles.....	12	1	"	"	"	"	"	"

" Running over 10 hours per day.

Inspection Book No. 8.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam is there low water alarm, and is it in good condition?
351	Gill Bros.....	Gill's Pier..	Lumber.....	20	20	10	26	7	\$1 60	St'm.	No
352	Peters & Soggs.....	Leland.....	Shingles.....	12	12	10	26	7	2 21	"	"
353	Schomberg Hardwood Lum. Co..	Good Harbor..	Lumber.....	35	35	10	26	7	1 65	"	Yes
354	Glen Arbor Lumber Co.....	Glen Arbor..	" etc.....	50	50	10	26	7	1 60	"	No
355	A. Bellenger.....	Maple City..	".....	8	8	10	26	6	1 50	"	"
356	J. Sullivan.....	Cedar.....	Shingles.....	43	43	10	26	10	1 82	"	"
357	".....	".....	Lumber.....	42	42	10	26	2	1 70	"	"
358	Dewey Stave Co.....	".....	Staves, etc..	60	35	10	26	11	1 26	"	Yes
359	Anthony Iverson.....	Lake City..	Lumber.....	18	18	10	26	7	1 50	"	No
360	Grice Bros.....	".....	Flour, etc....	5	5	10	26	12	1 48	"	"
361	L. C. Boyce.....	".....	Shingles, etc.	11	11	10	26	11	1 52	"	"
362	Jno. Meredith.....	".....	Lumber.....	11	11	10	26	7	1 50	"	"
363	S. Wernicke.....	".....	Shingles.....	12	1	"	"	"	"	"	"
364	C. H. Fisher.....	".....	Lumber.....	10	10	10	"	6	1 55	St'm.	No
365	Daniel Reeder.....	".....	Water.....	1	1	24	30	12	1 00	"	"
366	J. W. Arbuckle.....	".....	Lumber.....	7	1	"	"	"	"	"	"
367	T. V. Gray.....	".....	".....	16	16	10	26	6	1 44	St'm.	No
368	D. C. Church.....	".....	".....	9	9	10	26	7	1 61	"	"
369	C. D. Mynning.....	".....	".....	20	20	10	26	10	1 60	"	"
370	J. Sturm & Son.....	".....	".....	20	20	10	26	7	1 55	"	"
371	Missaukee Manufacturing Co....	".....	" etc.....	25	25	10	26	2	1 52	"	"
372	A. S. Frey.....	Frey.....	".....	40	40	10	26	12	1 50	"	"
373	Geo. Calvert.....	Falmouth..	Flour, etc....	3	3	10	26	12	1 67	W'r.	"
374	".....	".....	Lumber.....	12	12	10	26	5	1 50	"	"
375	Jno. Morey.....	Stittsville..	".....	12	1	"	"	"	"	"	"
376	Jno. Sherman.....	Moorestown..	".....	12	12	10	26	6	1 50	St'm.	No
377	A. Ferris.....	".....	".....	14	12	10	26	7	1 50	"	"
378	Mitchell Bros.....	Jennings.....	".....	178	178	10	26	12	1 60	"	"
379	".....	".....	Flooring.....	82	82	10	26	12	1 55	"	Yes
380	J. S. Edwards.....	Hersey.....	Flour, etc....	5	5	11	26	12	1 65	W'r.	"
381	".....	".....	Lumber.....	20	1	"	"	"	"	"	"
382	Hersey Cheese Factory.....	".....	Cheese.....	4	4	10	26	7	1 50	St'm.	No
383	James Crandall.....	Slights.....	Shingles.....	20	20	10	26	7	1 75	"	"
384	W. A. Blakely.....	Petoskey.....	Dressed lum..	5	5	10	26	12	1 60	"	"
385	P. Middleditch.....	".....	Repairs.....	5	5	10	26	12	1 73	"	"
386	The Record.....	".....	Newsp'rs, etc.	5	5	10	26	12	2 00	W'r.	"
387	Petoskey City Water Works....	".....	Water.....	3	2	24	30	12	2 00	St'm.	No
388	" Electric Light Co.....	".....	Electricity...	7	7	24	30	12	1 66	W & S	Yes
389	Frank Winsor.....	".....	Novelties.....	20	1	"	"	"	"	"	"
390	Andrew Quallins.....	".....	Cigars.....	4	4	8	26	12	1 62	None	"
391	F. Walkenstein.....	".....	Clothing.....	3	3	10	26	12	2 07	Hand	"
392	Boynton & Corbett.....	".....	Cigars.....	6	6	8	26	12	1 96	"	"
393	L. M. Howard.....	".....	".....	8	8	8	26	12	1 80	"	"
394	Cook & Merrill.....	".....	Boats.....	6	4	10	26	12	1 69	St'm.	No
395	W. L. McManus.....	".....	Lumber.....	46	46	11	26	12	1 85	S & W	"
396	".....	".....	Dressed lum..	19	19	10	26	12	1 30	St'm.	"
397	Birkett Bros.....	".....	Woodenware..	19	8	10	26	8	1 40	W'r.	"
398	".....	".....	Flour, etc....	2	1	10	26	12	1 66	"	"
399	Bull & Baurle.....	".....	Novelties.....	40	22	10	26	12	1 20	St'm.	No
400	Thos. Forman & Co, Ltd.....	".....	Flooring.....	75	75	10	26	12	1 59	"	"

* Running day and night.

° Running 7 days per week.

° Running over 10 hours per day.

Inspection Book No. 9.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
401	L. G. Grimes.....	Petoskey...	Shingles.....	12	12	10	26	8	\$1 54	St'm.	Yes
402	Star Laundry.....	"	Laundry.....	6	1	"	"	"	"	"	"
403	Caskey & Son.....	"	Dressed lum.	10	10	"	20	8	1 40	St'm.	No
404	C. S. Rouse.....	"	Chairs.....	4	2	10	26	12	1 50	Hand	"
405	Hankey & Son.....	"	Flour, etc.....	4	4	10	26	12	1 90	W'tr.	"
406	A. J. Dearthmont.....	"	Lumber.....	5	5	10	26	7	1 60	St'm.	No
407	F. D. Merchant.....	"	"	7	7	10	16	7	1 37	"	"
408	New Era Steam Laundry.....	"	Laundry.....	14	14	10	26	4	1 34	"	"
409	H. O. Rose.....	"	Line.....	32	16	10	26	9	1 45	Hand	"
410	H. O. Rose.....	"	Barrels.....	7	1	"	"	"	"	"	"
411	Independent Democrat.....	"	Newsp'r's, etc.	10	10	10	26	12	1 35	W'tr.	"
412	L. G. Grimes.....	"	Brick.....	13	1	"	"	"	"	"	"
413	S. H. Peck.....	"	Laundry.....	5	5	10	26	5	1 26	St'm.	No
414	Burnett Machine Works.....	"	Repairs.....	6	6	10	26	12	1 50	"	"
415	T. K. Neal.....	Harbor Springs	Lumber.....	26	26	10	26	12	1 50	"	"
416	A. J. Southard.....	"	Flour, etc.....	4	1	"	"	"	"	"	"
417	Hankey & Sons.....	"	"	2	2	10	26	12	1 58	St'm.	No
418	E. Shay & Sons.....	"	Repairs.....	6	6	10	26	12	1 30	"	"
419	The Republican.....	"	Newsp'r's, etc.	4	4	10	26	12	1 66	Hand	"
420	Graphic.....	"	"	5	5	10	26	12	1 33	"	"
421	Carey Hoop Co.....	"	Hoops.....	46	46	10	26	9	1 41	St'm.	No
422	Bay View Camp Meeting Ass'n.	Bay View..	Electricity.....	2	2	18	30	5	1 75	"	"
423	W. W. Rice Leather Co.....	Kegomlie..	Leather.....	83	83	10	26	12	1 73	"	"
424	Courier.....	Charlevoix.	Newsp'r's, etc.	3	3	10	26	12	1 25	Gas.	"
425	Charlevoix Roller Mills.....	"	Flour, etc.....	9	9	10	26	12	1 75	St'm.	No
426	Charlevoix Lumber Co.....	"	Lumber.....	28	28	10	26	9	1 68	"	"
427	"	"	Dressed lum.	12	12	10	26	12	1 67	Rent.	"
428	The Sentinel.....	"	Newsp'r's, etc.	3	3	10	26	12	1 38	St'm.	No
429	Cram, Whitford & Co.....	"	Lumber.....	24	24	10	26	6	1 60	"	"
430	M. Stover.....	"	Dressed lum.	5	5	10	26	7	1 48	"	Yes
431	H. Barth.....	"	Boilers.....	5	2	10	26	12	2 12	Hand	"
432	Enterprise Manufacturing Co.....	"	Floats.....	4	1	"	"	"	"	"	"
433	A. Butters.....	"	Shingles.....	"	"	"	"	"	"	"	"
434	Otto Dewitt.....	"	"	10	"	"	"	"	"	"	"
435	O. S. Washburn.....	"	Repairs.....	4	3	10	26	12	1 60	Gas.	"
436	D. M. Ferry.....	"	Seeds.....	22	1	"	"	"	"	"	"
437	W. K. Francis.....	"	Dressed lum.	6	"	"	"	"	"	"	"
438	Charlevoix Elec. Light Works.....	"	Electricity.....	6	6	24	30	12	1 86	St'm.	Yes
439	Beauvis Boat & Canoe Co.....	"	Boats.....	10	1	"	"	"	"	"	"
440	L. E. Smith.....	"	Laundry.....	14	9	10	26	12	1 03	St'm.	No
441	The Inn.....	"	"	12	12	10	26	5	1 00	"	"
442	G. G. Williams & Co.....	"	Bowls.....	7	1	"	"	"	"	"	"
443	East Jordan Lumber Co.....	East Jordan	Dressed lum.	18	10	10	26	12	1 65	Rent.	"
444	"	"	Lumber.....	60	60	10	26	9	1 65	St'm.	No
445	"	"	"	70	70	10	26	9	1 58	"	"
446	Malpaso Bros.....	"	Repairs.....	4	3	10	26	12	2 25	"	"
447	The Enterprise.....	"	Newsp'r's, etc.	2	2	10	26	12	2 00	"	"
448	South Arm Lumber Co.....	South Arm.	Lumber.....	57	57	10	26	8	1 60	"	"
449	The Elm Hoop Co.....	"	Hoops.....	30	1	"	"	"	"	"	"
450	S. A. Bush.....	"	Lumber.....	25	25	10	26	3	1 60	St'm.	No

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 10.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. If idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
451	Bellaire Woodenware Co.	Bellaire	Woodenware.	60	60	12	26	12	\$1 25	St'm.	No
452	Henry Richard.	"	Novelties	20	20	10	26	12	1 40	W & S	"
453	Tindle & Jackson.	"	Hoops, etc.	115	115	10	26	8	1 40	St'm.	"
454	Morgan & Co.	"	Lumber, etc.	22	22	10	26	12	1 50	"	"
455	W. M. Davenport.	"	Shingles.	25	25	10	26	7	1 60	"	"
456	C. C. Potter & Co.	"	Lumber.	26	26	10	26	7	1 60	"	"
457	Henry Richard.	"	Dressed lum.	4	2	10	26	12	1 50	Water.	"
458	The Sentinel.	"	Newsp'rs, etc.	3	2	10	26	12	1 50	Hand	"
459	The Independent.	"	"	2	2	10	26	12	1 50	Gas	"
460	Warner & McKay	"	Lumber.	7	1						
461	Cameron Lumber Co.	Torch Lake.	"	60	60	10	26	8	1 75	St'm.	No
462	"	"	Shingles, etc.	41	41	10	26	7	1 80	"	"
463	"	Central Lake	Handles.	27	27	10	26	9	1 60	Rent.	"
464	"	"	Lumber.	150	100	10	26	10	1 60	St'm.	No
465	"	"	Dressed lum.	6	6	10	26	12	1 50	"	"
466	Walbrecht Bros.	"	Flour, etc.	3	3	10	26	12	1 67	"	"
467	Liken, Brown & Co.	"	Hoops, "	60	35	10	26	12	1 30	"	"
468	Clarence Hunt.	"	Brick	20	1					"	"
469	F. H. Skow.	Ellsworth	Shingles.	11	11	10	26	6	1 75	St'm.	No
470	Cameron Lumber Co.	"	Lumber	40	40	10	26	8	1 60	"	"
471	Ellsworth	"	Dressed lum.	12	1					"	"
472	R. L. Sleeper	"	Lumber	25	25	10	26	8	1 60	St'm.	No
473	W. J. Kent.	"	Shingles.	11	1					"	"
474	Elk Rapids Steam Laundry.	Elk Rapids.	Laundry.	4	3	10	26	12	1 25	St'm.	No
475	" Iron Co.	"	Chemicals.	30	30	a24	o30	12	1 64	"	"
476	"	"	Pig Iron.	125	125	a24	o30	12	1 58	"	Yes
477	The Progress	"	Newsp'rs, etc.	4	4	10	26	12	1 38	Water.	"
478	Michigan Mfg. Co.	"	Lath	18	1					"	"
479	Bacon Bros. & Ayer.	Alden.	Lumber.	40	40	10	26	9	1 75	St'm.	No
480	Harry Rose	"	"	12	1					"	"
481	Bay Shore Lime Co.	Bay Shore.	Barrels.	15	15	10	26	8	1 55	St'm.	Yes
482	"	"	Lime.	55	55	10	26	8	1 65	Hand	"
483	"	"	"	10	10	10	26	8	1 65	"	"
484	Kirby, Carpenter & Co.	Menominee	Lumber.	95	95	10	26	8	2 00	St'm.	No
485	"	"	"	41	41	10	26	8	1 95	"	"
486	"	"	" etc.	77	77	a20	26	8	1 95	"	"
487	"	"	Repairs.	15	15	10	26	12	2 15	"	"
488	"	"	Dressed lum.	13	13	10	26	12	1 83	"	"
489	"	"	Lumber.	290	290	10	26	12	1 70	Hand	"
490	Chas. Yost.	"	Laundry.	3	3	10	26	12	1 00	"	"
491	Menominee River Brewing Co.	"	Beer.	26	26	10	26	12	1 70	St'm.	No
492	M. & M. Paper Co.	"	Paper.	24	24	a24	26	12	1 35	"	"
493	"	"	Pulp.	20	20	a24	26	12	1 35	Water.	"
494	Menominee Boiler Works.	"	Boilers.	28	28	10	26	12	2 00	St'm.	No
495	Hubbard Saw Tool Co.	"	Saws.	15	15	10	26	12	3 00	"	"
496	Jno. Macinkiewicz.	"	Cigars.	6	4	8	26	12	1 66	Hand	"
497	Dudley Cycle Co.	"	Repairs.	20	10	10	26	12	1 35	St'm.	No
498	Hone's Steam Laundry.	"	Laundry.	8	8	10	26	12	1 25	"	"
499	Menominee Elec. R.W. & P. Co.	"	Electricity.	39	39	a24	o30	12	1 70	"	"
500	E. A. Duval.	"	Clothing.	8	8	10	26	12	2 50	Hand	"

• Running day and night.
 ° Running 7 days per week.

Inspection Book No. 11.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
501	Ramsay & Jones.....	Menominee	Lumber.....	80	I	8	10	26	12	St'm.	No
502	Quimby Steam Laundry.....	"	Laundry.....	8	8	10	26	12	\$1 16	St'm.	No
503	Harding Shingle Co.....	"	Shingles.....	24	23	10	26	6	2 24	"	"
504	Menominee River Shingle Co.....	"	".....	100	50	10	26	8	2 00	"	"
505	Burnes & Hicks.....	"	Lumber.....	150	135	10	26	6	1 78	"	"
506	Pangborn Manufacturing Co.....	"	Novelties.....	7	I	10	26	12	1 10	St'm.	No
507	Peninsular Box & Lum. Co.....	"	Boxes.....	69	69	10	26	12	1 10	St'm.	No
508	Kenyon Manufacturing Co.....	"	Sash, etc.....	18	I	10	26	7	1 70	St'm.	No
509	A. Spies.....	"	Lumber.....	90	90	10	26	8	1 70	St'm.	No
510	Girard Lumber Co.....	"	".....	84	84	10	26	8	1 71	"	"
511	A. W. Clark Lumber Co.....	"	Match-boxes.....	165	150	10	26	12	1 25	"	"
512	Menominee Elec. Mfg. Co.....	"	Elec. goods.....	97	97	10	26	12	1 35	Elec.	"
513	D. Clint Prescott Co.....	"	Repairs.....	87	85	10	26	12	2 12	St'm.	No
514	Bay Shore Lumber Co.....	"	Lumber.....	169	160	10	26	9	1 73	"	"
515	Crawford Manufacturing Co.....	"	Dressed lum.....	50	50	10	26	12	1 50	"	"
516	Richardson Shoe Co.....	"	Shoes.....	100	92	10	26	12	1 52	"	Yes
517	Ludington, Wells & V. S. Co.....	"	Lumber, etc.....	137	137	10	26	8	2 00	"	No
518	" " " " " "	"	Dressed lum.....	50	I	10	26	12	1 50	"	No
519	" " " " " "	"	Lumber.....	80	"	10	26	12	1 50	"	No
520	Jno. Stiles.....	"	Cigars.....	12	12	8	26	12	2 04	Hand	"
521	Novelty Advertising Co.....	"	Novelties.....	6	I	10	26	12	1 95	"	"
522	Lindsley Bros.....	"	Cedar posts.....	5	"	10	26	12	2 07	Hand	"
523	A. B. Striker.....	"	Cigars.....	9	9	10	26	12	2 07	Hand	"
524	Menominee Stained Glass Wks.....	"	Glass.....	18	5	10	26	12	2 50	"	"
525	Geo. Christoph.....	"	Clothing.....	5	4	10	26	12	2 22	"	"
526	H. P. Schmidt.....	"	Baked goods.....	5	4	10	26	12	1 25	"	"
527	Leisen & Henes Brewing Co.....	"	Beer.....	30	30	10	26	12	1 93	St'm.	No
528	Donovan & O'Connor.....	"	Lumber, etc.....	100	80	10	26	8	1 85	"	"
529	Jno. G. Engberg.....	"	Repairs.....	6	6	10	26	12	1 60	Hand	"
530	The Herald.....	"	Newsp'rs, etc.....	8	6	9	26	12	1 80	Elec.	"
531	Evening Leader Publishing Co.....	"	".....	7	7	9	26	12	95	"	"
532	A. L. Anderson.....	"	Blank books.....	3	3	10	26	12	1 39	Hand	"
533	D. J. Fisher.....	"	Paper boxes.....	6	5	10	26	12	1 10	"	"
534	W. B. Gregory.....	"	Printing.....	5	5	9	26	12	1 50	Elec.	"
535	O. E. Schulz.....	"	Clothing.....	11	11	10	26	12	2 77	Hand	"
536	Menominee Water Co.....	"	Water.....	7	7	24	30	12	1 70	St'm.	No
537	Pioneer & Volksfrund.....	"	Newsp'rs, etc.....	6	6	10	26	12	1 17	Hand	"
538	F. A. Wachowiak.....	"	Clothing.....	5	5	10	26	12	1 80	"	"
539	A. Sklowsky.....	"	".....	5	5	10	26	12	2 26	"	"
540	G. M. Smith & Co.....	Wallace....	Lumber.....	45	I	10	26	12	1 70	"	"
541	John Perkins.....	Stephenson	Flour, etc.....	4	"	10	26	12	1 67	Gas..	"
542	The Menominee Co. Journal.....	"	Newsp'rs, etc.....	4	3	10	26	12	1 77	St'm.	No
543	Crawford & Sons.....	Cedar River	Lumber.....	150	150	10	26	8	1 70	"	"
544	Escanaba Elec. Co.....	Escanaba...	Electricity.....	17	17	18	30	12	1 70	"	"
545	I. Stephenson.....	"	Dressed lum.....	12	I	10	26	12	1 70	"	"
546	Escanaba Iron Works.....	"	Repairs.....	18	10	10	26	12	2 00	St'm.	No
547	C. & N. W. R. R. Co.....	"	".....	192	192	10	26	12	1 80	"	"
548	" " " " " "	"	".....	118	118	10	26	12	1 62	Hand	"
549	Escanaba Water Works.....	"	Water.....	7	7	24	30	12	1 95	St'm.	No
550	Delta Co. Bottling Works.....	"	Gingerale, etc.....	3	2	10	26	12	1 70	Hand	"

* Running day and night.
 ° Running 7 days per week.

Inspection Book No. 12.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
561	Ephraim & Morrell.....	Escanaba...	Clothing.....	6	3	10	26	12	\$2 50	Hand.....	.....
562	Rathfon Bros.....	"	"	6	6	10	26	12	2 36	"	.....
563	Escanaba Steam Laundry.....	"	Laundry.....	11	10	10	26	12	1 11	St'm.	No
564	Louis Kerstine.....	"	Clothing.....	6	4	10	26	12	2 00	Hand.....	.....
565	Conrad Elfler.....	"	Cigars.....	3	2	8	26	12	2 13	"	.....
566	Escanaba Journal.....	"	Newsp'r, etc.....	7	5	10	26	12	"	St'm.	No
567	Wickman & Lindblom.....	"	Clothing.....	5	5	10	26	12	2 00	Hand.....	.....
568	Christ Koepke.....	"	Cigars.....	5	3	8	26	12	2 03	"	.....
569	N. Williams.....	"	Dressed lum.....	4	4	10	26	12	2 25	St'm.	No
560	Joseph Wickert.....	"	Cigars.....	9	9	8	26	12	2 36	Hand.....	.....
561	The Iron Port.....	"	Newsp'r, etc.....	5	5	9½	26	12	1 44	Gas.....	.....
562	Henry Wagon Works.....	"	Wagons.....	7	7	10	26	12	2 00	Hand.....	.....
563	Delta Co. Steam Laundry.....	"	Laundry.....	6	6	10	26	7	1 00	St'm.	No
564	Escanaba Bottling Works.....	"	Pop, etc.....	3	2	10	26	12	2 25	St'm.	No
565	Collins & English.....	"	Newsp'r, etc.....	10	10	9½	26	12	1 03	Gas.....	.....
566	Peter Olson.....	"	Clothing.....	5	5	10	26	12	2 50	Hand.....	.....
567	Henry Gunter.....	"	Meats.....	7	7	10	26	12	1 52	"	.....
568	C. & N. W. R. R. Ore Docks.....	"	Iron ore.....	200	200	20	26	6	1 80	"	.....
569	Escanaba Woodenware Co.....	"	Woodenware.....	200	130	10	26	12	2 07	St'm.	No
570	Escanaba Brewing Co.....	"	Beer.....	10	10	10	26	12	2 00	"	.....
571	Charles Joerges.....	"	Cigars.....	4	4	8	26	12	2 00	Hand.....	.....
572	Brandequest Cycle Works.....	"	Repairs.....	5	3	10	26	12	1 40	"	.....
573	C. M. & St. Paul Ore Docks.....	"	Iron ore.....	200	200	20	26	12	1 80	"	.....
574	I. Stephenson.....	Wells.....	Lumber.....	142	1	"	"	"	"	"	.....
575	"	"	Shingles.....	16	"	"	"	"	"	"	.....
576	"	"	Dressed lum.....	11	11	10	26	4	1 60	St'm.	No
577	Gross & Sons.....	"	Stone.....	8	5	10	26	12	1 62	Hand.....	.....
578	Ford River Lumber Co.....	Ford River.....	Lumber.....	250	250	10	26	7	1 75	St'm.	No
579	"	"	Shingles.....	55	55	10	26	7	2 21	"	.....
580	M. J. Gleason.....	Gladstone.....	Laundry.....	8	8	10	26	12	1 11	"	.....
581	W. L. Marble.....	"	Axes.....	16	16	10	26	12	1 85	"	.....
582	Gladstone Water Works.....	"	Water.....	4	3	24	26	12	1 82	"	.....
583	Northwestern Cooperage & Lumber Co.....	"	Staves.....	125	125	10	26	11	1 75	"	.....
584	"	"	Lumber, etc.....	60	60	10	26	3	1 75	"	.....
585	M., St. P. & S. Ste. M. R. R.....	"	Repairs.....	48	48	10	26	12	1 60	"	.....
586	Johnson Lumber Co.....	"	Lumber.....	40	40	10	26	2	1 75	"	.....
587	Soo Line Elevator.....	"	Grain.....	350	350	10	26	12	2 00	S & G	"
588	Pioneer Fuel Co.....	"	Coal.....	125	125	10	26	12	2 00	Hand.....	.....
589	The Nat'l Cooperage & Lum. Co.....	"	Lumber, etc.....	45	45	10	26	4	1 75	St'm.	No
590	I. G. Champion.....	"	Cigars.....	3	3	8	26	12	1 77	Hand.....	.....
591	The Delta.....	"	Newsp'r, etc.....	4	4	10	26	12	2 00	Gas.....	.....
592	Gladstone Milling Co.....	"	Flour, etc.....	3	3	10	26	12	2 00	St'm.	No
593	Smith & Walz.....	"	Clothing.....	4	4	10	26	12	2 32	Hand.....	.....
594	W. L. Lord.....	"	Lumber.....	8	8	10	26	5	1 85	St'm.	No
595	G. Engstrom.....	"	Clothing.....	5	4	10	26	12	2 00	Hand.....	.....
596	The Ely Dowel Mfg. Co.....	"	Dowels.....	12	1	"	"	"	"	"	.....
597	The Cleveland Cliffs Iron Co.....	"	Chemicals.....	14	14	24	26	12	1 57	St'm.	Yes
598	"	"	Pig iron.....	150	150	24	26	12	1 70	"	.....
599	Garth Lumber Co.....	Garth.....	Lumber, etc.....	175	175	10	26	7	2 00	"	No
600	"	"	Dressed lum.....	15	1	"	"	"	"	"	.....

a Running day and night.

• Not given.

o Running 7 days per week.

Inspection Book No. 13.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is in good condition?
601	Masonville Hoop Co.	Masonville.	Staves	96	96	10	26	10	\$1 75	St'm.	No
602	Naugle, Holcomb & Co.	"	Posts	40	1	1	26	10	1	St'm.	No
603	Jerry Madden Lumber Co.	Rapid River	Shingles.	125	60	111	26	6	1 80	St'm.	No
604	Bay DeNogue Co.	Nahma	Lumber	300	280	10	26	7	1 90	"	"
605	VanWinkle & Montague.	Vans Harb'r	" etc.	290	290	10	26	8	1 78	"	"
606	E. A. Tighe	Cook's Mill.	"	10	1	1	26	10	1 75	St'm.	No
607	W. S. Snow	Isabella	"	10	1	1	26	10	1 75	St'm.	No
608	White Marble Lime Co.	Manistique.	Shingles	40	40	10	26	10	2 00	St'm.	No
609	"	"	Lime	20	20	11	26	8	1 35	"	"
610	Burrell Chemical Co.	"	Chemicals	115	85	24	26	12	1 70	"	"
611	Manistique Iron Co.	"	Pig iron	80	80	24	30	12	1 90	"	"
612	Pioneer Tribune	"	Newsp'r, etc.	4	4	10	26	12	2 08	"	"
613	Weston Mfg. Co.	"	Boxes	75	30	10	26	12	1 76	"	"
614	Chicago Lumber Co.	"	Lumber, etc.	107	107	11	26	8	2 00	Wat'r	
615	"	"	Logs.	500	500	10	26	7	1 50	Hand	
616	"	"	Lumber	200	200	11	26	7	1 75	"	
617	W. L. Co. No. 1	"	" etc.	50	50	11	26	8	1 80	Wat'r	
618	" " 2	"	" etc.	95	95	11	26	8	1 90	"	
619	M. & N. W. R. R.	"	Logs	100	100	10	26	10	1 75	Hand	
620	J. A. McAllister	"	Repairs	3	3	10	26	12	2 25	St'm.	No
621	W. H. LaDuc	"	Cigars	6	6	8	26	12	1 92	Hand	
622	P. Zimmerman	"	"	7	7	10	26	12	1 36	"	
623	The Courier	"	Newsp'r, etc.	3	2	10	26	12	1 90	"	
624	The Democrat	"	"	3	3	10	26	12	1 31	"	
625	Manistique Steam Laundry	"	Laundry	7	7	10	26	12	1 14	St'm.	No
626	Peterson & Johnson	"	Clothing	4	4	10	26	12	2 00	Hand	
627	Manistique Electric Co.	"	Electricity	4	3	18	30	12	1 67	Wat'r	
628	A. F. Temple	"	Curtain poles	15	1	1	26	12	2 25	Hand	
629	W. P. Reinwand	"	Clothing	3	3	10	26	12	2 25	Hand	
630	F. & F. Lumber Co.	Thompson	Lumber, etc.	140	140	10	26	6	1 75	St'm.	No
631	"	"	"	95	95	10	26	6	1 89	"	"
632	White Marble Lime Co.	Marblehead	Lime	20	20	11	26	10	1 35	"	"
633	"	Whitedale	Shingles.	25	25	11	26	11	2 00	"	"
634	O. W. Smith	Trout Lake	"	9	1	1	26	12	1 80	Wat'r	
635	The Enterprise	St. Ignace	Newsp'r, etc.	6	6	10	26	12	1 80	Wat'r	
636	The Republican News	"	"	5	5	10	26	12	1 00	St'm.	No
637	St. Ignace Water W'ks & L't. Plt.	"	Water, etc.	3	3	24	30	12	1 83	"	
638	Martel Furnace Co.	"	Pig iron.	100	1	1	26	12	1 56	St'm.	No
639	J. Jamieson Lumber Co.	"	Lumber, etc.	54	54	10	26	6	1 56	St'm.	No
640	Gateway Steam Laundry	"	Laundry.	6	1	1	26	12	2 26	Rent.	
641	Island " "	Mackinac I.	"	13	3	10	26	5	1 20	St'm.	No
642	Detour Cedar & Lumber Co.	Detour	Lumber, etc.	70	70	10	26	6	1 87	"	"
643	A. Highstone	"	Shingles.	1	1	1	26	12	2 00	St'm.	No
644	Mud Lake Lumber Co.	Raber	Lumber, etc.	43	43	10	26	7	2 00	St'm.	No
645	Geo. H. Acker	"	Shingles.	18	1	1	26	12	2 26	Rent.	
646	Jno. Spry Lumber Co.	Neebish	Lumber	100	100	11	26	6	1 75	St'm.	No
647	Hall & Munson	Bay Mills	" etc.	16	1	1	26	12	2 00	St'm.	No
648	Alfred Curtis	Dafer	"	256	256	11	26	12	2 00	St'm.	No
649	Hall & Munson	Bay Mills	Boxes, etc.	9	9	11	26	12	2 26	Rent.	
650	"	"	Repairs	9	9	11	26	12	2 26	Rent.	

• Running day and night.
 ° Running 7 days per week.
 * Running over 10 hours per day.

Inspection Book No. 14.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection.	Number of employees idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
651	Pen'a Bark & Lumber Co.....	Sault Ste. Marie	Lumber, etc.	91	91	10	26	4	\$1 62	St'm.	No	
652	Northwestern Leather Co.....	" "	Leather.....	200	8	10	26	2	1 50	"	"	
653	Bradley, Watson & Co.....	" "	Shingles.....	30	20	10	26	3	1 75	"	"	
654	Soo Roller Mills.....	" "	Flour, etc.....	4	4	10	26	12	2 00	Elec.	"	
655	Soo Water Works.....	" "	Water.....	3	3	24	26	12	2 97	St'm.	No	
656	The Soo News.....	" "	Newsp'rs, etc.	14	14	9	26	12	1 32	Elec.	"	
657	Union Carbide Co.....	" "	Carbide.....	32	1	"	"	"	"	"	"	
658	T. E. Logan.....	" "	Gas fittings..	4	4	10	26	12	2 25	Hand	"	
659	Troy Steam Laundry.....	" "	Laundry.....	16	16	10	26	12	1 06	St'm.	No	
660	Soo Cycle Co.....	" "	Repairs.....	4	4	10	26	12	1 95	Elec.	"	
661	The Times.....	" "	Newsp'rs, etc.	7	7	9	26	12	2 00	"	"	
662	J. B. Sweatt.....	" "	Dressed lum.	20	20	10	26	12	1 90	St'm.	No	
663	Mason, Hoge Co.....	" "	Contracting..	300	300	10	26	12	2 00	"	"	
664	Soo Democrat.....	" "	Newsp'rs, etc.	11	11	9	26	12	1 89	Elec.	"	
665	" Edison Electric Co.....	" "	Electricity....	12	10	24	26	12	2 00	W't'r	"	
666	Hickler Bros.....	" "	Repairs.....	21	21	10	26	12	2 12	St'm.	No	
667	Soo Woolen Mills.....	" "	Yarn, etc.....	9	9	10	26	12	1 50	S & E	"	
668	Great Lakes Laundry, Ltd.	" "	Laundry.....	54	34	10	26	12	1 10	St'm.	"	
669	Jno. Vaughn.....	" "	Clothing.....	2	2	10	26	12	1 50	Hand	"	
670	Marine Iron Works.....	" "	Repairs.....	7	1	"	"	"	"	"	"	
671	Alfred Lauzon.....	" "	Lumber.....	14	"	"	"	"	"	"	"	
672	Nesse Mfg. Co.....	" "	Dressed lum.	24	10	"	26	"	1 91	St'm.	Yes	
673	Kelly & Mayer.....	" "	Shingles.....	5	5	10	26	12	1 07	Hand	"	
674	Wah Lee.....	" "	Laundry.....	5	5	10	26	12	1 06	"	"	
675	Wang Tong.....	" "	".....	5	5	10	26	12	"	"	"	
676	Chippewa Hardware Co.....	" "	Tinware, etc.	9	9	10	26	12	1 92	"	"	
677	Tymon Lumber Co.....	" "	Dressed lum.	14	14	10	26	12	1 75	St'm.	No	
678	E. D. Smith.....	" "	Contracting..	700	700	20	26	10	2 00	"	"	
679	E. R. Lange.....	" "	Clothing.....	3	3	10	26	12	2 00	Hand	"	
680	Atken & Lange.....	" "	".....	9	9	10	26	12	1 97	"	"	
681	Jas. Milk.....	" "	".....	7	7	10	26	12	2 31	"	"	
682	Soo Cigar Co.....	" "	Cigars.....	6	6	8	26	12	1 96	"	"	
683	J. W. McTavish.....	" "	".....	3	3	8	26	12	1 80	"	"	
684	International Paper Co.....	Brimley	Wood pulp...	70	1	"	"	"	"	"	"	
685	Danaher & Malendy.....	Dollarville..	Lumber, etc.	200	185	11	26	8	1 61	St'm.	No	
686	".....	"	Shingles.....	15	15	11	26	7	2 00	"	"	
687	Sag. Valley Cooperage Co.....	"	Staves.....	15	1	"	"	"	"	"	"	
688	The Newberry News.....	Newberry	Newsp'rs, etc.	2	2	10	26	12	1 75	St'm.	No	
689	Newberry Furnace Co.....	"	Pig iron.....	300	1	"	"	"	"	"	"	
690	A. J. Noble.....	"	Shingles.....	10	"	"	"	"	"	"	"	
691	Youngs & King.....	Seney.....	".....	35	"	"	"	"	"	"	"	
692	J. W. Balcomb.....	"	".....	20	"	"	"	"	"	"	"	
693	Clark & Acker.....	Wetmore.....	".....	18	"	"	"	"	"	"	"	
694	Marais Lumber Co.....	Grand Marais..	Lumber, etc.	200	200	10	26	8	1 90	St'm.	No	
695	".....	"	Electricity....	3	3	12	26	12	1 90	"	"	
696	".....	"	Dressed lum.	7	1	"	"	"	"	"	"	
697	Doig & Leighton.....	"	Shingles.....	10	"	"	"	"	"	"	"	
698	Chas. Stone.....	"	".....	28	"	"	"	"	"	"	"	
699	Marais Lumber Co.....	"	".....	31	31	10	26	8	2 20	St'm.	No	
700	Manistique Lumber Co.....	"	Lumber, etc.	500	500	10	26	12	1 60	Hand	"	

* Running day and night.
 ° Running 7 days per week.
 u Running over 10 hours per day.

Inspection Book No. 15.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
701	The Grand Marais Herald.....	Grand Marais..	Newsp'rs, etc.	4	3	10	26	12	\$1 06	Hand	..
702	Thos. Regan.....	"	Cigars.....	4	3	8	26	12	1 40	"	..
703	Forster Lumber Co.....	Munising...	Lumber, etc.	105	105	10	26	8	1 75	St'm	No
704	Thos. Belknap.....	"	Electricity...	4	3	12	30	12	1 58	"	..
705	H. M. Loud & Sons.....	"	Shingles, etc.	95	95	10	26	10	2 00	"	..
706	Northwestern Cooperage Co.....	"	Lumber.....	60	50	10	26	9	2 00	"	..
707	Geo. S. Burtis.....	"	Lumber, etc.	140	51	10	26	9	2 08	"	..
708	Northw'n Cooperage & Lum. Co.	"	Staves, ..	60	40	10	26	9	1 90	"	..
709	The Munising Republican.....	"	Newsp'rs, etc.	4	3	10	26	12	1 94	Gas	..
710	" " News.....	"	" " "	4	4	10	26	12	2 60	"	..
711	L. M. Howard.....	"	Cigars.....	4	4	8	26	12	2 00	Hand	..
712	The Munising Water Works.....	"	Water.....	2	1	24	30	12	2 00	St'm	No
713	Chas. Lee.....	"	Laundry.....	2	2	10	26	12	1 12	Hand	..
714	Needham Bros.....	Marquette	"	29	29	10	26	12	1 10	St'm	No
715	Pioneer Iron Co.....	"	Pig iron.....	32	32	24	30	12	2 00	"	..
716	Michigan H. of C. Branch Prison.	"	State instit'n.	100	78	10	26	12	2 42	"	Yes
717	Lakeshore Iron Works.....	"	Engines, etc.	110	110	10	26	12	2 10	"	No
718	D. S. S. & A. R. R.....	"	Repairs.....	238	238	10	26	12	1 85	Hand	..
719	Lake Superior Iron Co.....	"	Pig iron.....	50	1	..	..	..	..	..	..
721	Hanck & Deckelman.....	"	Cigars.....	8	8	8	26	12	1 50	Hand	..
722	M. C. & P. I. Ry. Co.....	"	Electricity ..	23	23	10	30	12	1 56	St'm	No
723	Dead River Lumber Co.....	"	Lumber, etc.	80	80	10	26	6	2 36	"	..
724	Marquette Veneer Works.....	"	Butter dishes	200	9	10	26	12	2 00	"	..
725	L. S. & I. R. R.....	"	Repairs.....	9	9	10	26	12	2 50	"	..
726	A. Boulson.....	"	Clothing.....	4	4	10	26	12	2 25	Hand	..
727	Simmons & Co.....	"	"	10	10	10	26	12	1 60	"	..
728	Mining Journal.....	"	Newsp'rs, etc.	20	18	20	26	12	2 00	Elec.	..
729	Chas. A. Eggers.....	"	Binding.....	6	4	10	26	12	1 80	Hand	..
730	Lakeside Iron Works.....	"	Repairs.....	8	4	10	26	12	2 50	St'm	No
731	Pickands & Co.....	"	Coal.....	10	10	12	26	12	2 50	"	..
732	Bice Manufacturing Co.....	"	Lumber.....	30	1	..	..	..	..	..	..
733	"	"	Dressed lum.	15	"	..	..	..	..	..	..
734	Butcher & Devine.....	"	Cigars.....	3	2	8	26	12	1 90	Hand	..
735	Marquette City Water Works.....	"	Water.....	5	5	24	30	12	2 53	St'm	No
736	D. S. S. & A. R. R. Ore Docks.....	"	Iron ore.....	75	75	20	30	12	1 80	Hand	..
737	F. H. Sanbrook.....	"	Dressed lum.	7	7	10	26	3	2 00	St'm	No
738	U. P. Brewing Co.....	"	Beer.....	17	17	10	26	12	2 00	"	Yes
739	Marquette Valley Milling Co.....	"	Flour, etc.	2	1	10	26	12	2 31	W'tr	..
740	Lake Superior Powder Co.....	"	Powder.....	40	40	10	26	12	2 00	St'm	No
741	City Light & Power Co.....	"	Electricity...	13	13	24	30	12	2 00	W'tr	..
742	Fred Sears.....	"	Shirts.....	10	1	..	..	..	..	..	..
743	F. W. Read & Co.....	"	Dressed lum.	20	20	10	26	12	1 60	St'm	No
744	Mrs. T. Duval.....	"	Clothing.....	4	4	10	26	12	2 00	Hand	..
745	Wm. Malmberg.....	"	Baked goods.	5	1	..	..	..	..	..	..
746	C. S. Yim.....	"	Laundry.....	3	2	10	26	12	1 25	Hand	..
747	E. J. Sink.....	"	Tinware, etc.	8	8	10	26	12	2 38	"	..
748	L. S. & I. Ore Docks.....	"	Iron ore.....	77	77	20	26	12	1 90	"	..
749	Marquette Gas Light Co.....	"	Gas.....	5	5	10	30	12	2 00	St'm	No
750	Portage Entry Quarries Co.....	"	Bldg. stone...	60	40	10	26	12	1 60	"	..

a Running day and night.
 o Running 7 days per week.
 u Running over 10 hours per day.

Inspection Book No. 16.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employes when running full capacity.	Number of employes at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
751	Marble & Granite Works	Marquette..	Tombstones..	2	1	10	26	3	\$2 75	Hand	....
752	H. Sternsrud	"	Plumbing....	4	3	10	26	12	2 45	"	....
753	Marquette Carriage Works	"	Carriages....	15	1						....
754	F. H. Sambrook	Harvey.....	Lumber.....	25	25	10	26	7	1 72	St'm.	No
755	Harvey Iron Co.....	"	Pig iron.....	60	1						....
756	F. W. Read & Co.....	Ishpeming..	Dressed lum.	45	45	10	26	12	1 60	St'm.	No
757	J. H. Mortley.....	"	Clothing....	6	6	10	26	12	1 75	Hand	....
758	Iron Ore	"	Newsp'r's, etc.	7	7	9	26	12	1 75	Elec.	....
759	Ishpeming Steam Laundry.....	"	Laundry.....	21	21	10	26	12	1 17	St'm.	No
760	J. J. Leffer.....	"	Sausage.....	3	2	10	26	12	1 60	"	"
761	W. T. Cole	"	Boilers.....	5	5	10	26	12	2 20	"	"
762	John T. Nichols.....	"	Cigars.....	5	5	8	26	12	2 00	Hand	....
763	Superior Posten.....	"	Newsp'r's, etc.	8	8	10	26	12	1 50	Elec.	....
764	A. Kittunen	"	Clothing....	5	5	10	26	12	2 40	Hand	....
765	Jaedecke Bros.....	"	Cigars.....	14	14	8	26	12	1 68	"	....
766	The Anthony Powder Co.....	"	Nitroglycer'n	9	9	10	26	12	2 56	St'm.	No
767	Excelsior Iron Co.....	"	Pig iron.....	40	1						....
768	E. E. Grip & Co.....	"	Carpentering	20	"						....
769	Chris. Rasmussen	"	Clothing....	4	2	10	26	12	2 25	Hand	....
770	Sorsen & Rasmussen.....	"	"	5	1						....
771	August Lundin.....	"	"	5	5	10	26	12	1 86	Hand	....
772	The Peninsula Record.....	"	Newsp'r's, etc.	6	6	10	26	12	1 62	Elec.	....
773	Negaunee Elec. Lt. & Wat'r Wks	Negaunee ..	Electricity...	3	3	24	30	12	2 03	St'm.	Yes
774	F. W. Read & Co.....	"	Lumber.....	42	1						....
775	A. G. Mannen	"	Baked goods..	5	3	10	26	12	1 60	Hand	....
776	The Negaunee Iron Herald	"	Newsp'r's, etc.	5	5	10	26	12	1 60	Elec.	....
777	Thoren & Son	"	Clothing....	6	4	10	26	12	2 08	Hand	....
778	Jackson Iron Co.....	"	Repairs.....	10	5	10	26	12	2 26	St'm.	No
779	H. J. Peterson	"	Clothing....	8	8	10	26	12	1 90	Hand	....
780	N. & I. St. R. W. Co.....	"	Electricity...	26	26	24	30	12	1 60	St'm.	No
781	D. C. Cushing.....	"	Cigars.....	4	1						....
782	J. O. Richard.....	"	Plumbing....	6	4	10	26	12	2 25	Hand	....
783	F. W. Read & Co.....	Michigamme.	Lumber.....	105	105	10	26	12	1 70	St'm.	No
784	The Daily Mining Gazette.....	Houghton..	Newsp'r's, etc.	34	34	10	26	12	1 93	Elec.	....
785	Haas Brewing Co.....	"	Beer	22	22	10	26	12	2 78	St'm.	Yes
786	Carroll Bros	"	Repairs.....	60	40	10	26	12	2 50	"	No
787	Alex. McDougall.....	"	Plumbing....	6	6	10	26	12	2 37	Hand	....
788	Twin City Steam Laundry.....	"	Laundry.....	20	20	10	26	12	1 50	St'm.	No
789	M. Van Orden	"	Lime.....	12	8	10	26	8	2 00	Hand	....
790	Lake Superior Pro. & C'd Stor. Co	"	Produce.....	19	19	10	26	12	2 44	St'm.	No
791	" " Soap Co	"	Soap.....	4	4	10	26	12	1 50	"	"
792	Pen'la Elec. Light & Power Co..	"	Electricity...	8	6	24	30	12	2 00	"	"
793	Copper Range R. R.....	"	Repairs.....	20	20	10	26	12	2 00	"	"
794	Phil. Schueriman	"	Beer.....	20	20	10	26	12	2 00	"	"
795	Jas. Pryor & Son	"	Dressed lum.	15	15	10	26	12	1 79	"	"
796	Gordon & Blonder	"	Clothing....	6	6	10	26	12	2 50	Hand	....
797	Wah Hah.....	"	Laundry.....	6	6	10	26	12	1 12	"	....
798	Jno. Stahl.....	"	Plumbing....	5	4	10	26	12	2 20	"	....
799	Tepler & Kutscheed.....	"	Cigars.....	4	4	8	26	12	2 00	"	....
800	Sturgeon River Lumber Co.....	Cassell.....	Lumber.....	167	167	20	30	8	1 71	St'm.	No

a Running day and night.
 o Running 7 days per week.

Inspection Book No. 17.

Inspection District No. 5.—Continued.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.		Number of employees at time of inspection. I for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
801	J. A. McLachlan.....	Chassell....	Shingles.....	16	I	.....	.....	.....	.....	.....	.....	.....
802	Estate of Thos. Nestor.....	Baraga.....	Lath, etc.....	300	282	.....	22	26	6	\$2 14	St'm.	No
803	Baraga Planing Mill.....	".....	Dressed lum.....	8	I	.....	.....	.....	.....	.....	.....	.....
804	Jno. Funke.....	".....	Lumber.....	40	"	.....	.....	.....	.....	.....	.....	.....
805	Baraga Republican.....	".....	Newsp'r's, etc.....	4	3	10	26	12	1	75	Hand	.....
806	Herman Falk.....	".....	Cigars.....	5	5	8	26	12	1	95	"	.....
807	L'Anse Brown Stone Co.....	L'Anse.....	Bldg. stone.....	40	I	.....	.....	.....	.....	.....	.....	.....
808	" Pressed Brick Co.....	".....	Brick.....	12	"	.....	.....	.....	.....	.....	.....	.....
809	" Sentinel.....	".....	Newsp'r's, etc.....	4	4	10	26	12	1	05	Wat'r	.....
810	Jno. Funkey.....	Hancock.....	Plumbing.....	14	14	10	26	12	2	50	Hand	.....
811	Hodge Iron Co.....	".....	Repairs.....	100	100	10	26	12	2	31	St'm.	No
812	Portage Lake Foun. & Mach. Co.....	".....	Boilers.....	90	90	10	26	12	2	36	"	"
813	Lake Superior Boiler Works.....	".....	Boilers.....	30	30	10	26	12	2	53	"	"
814	Portage Lake.....	".....	".....	12	12	10	26	12	2	46	"	"
815	M. J. Brustmaker.....	".....	Cigars.....	7	7	8	26	12	2	00	Hand	.....
816	August Pelto.....	".....	Clothing.....	7	7	10	26	12	1	90	"	.....
817	Armstrong, Thielman Lumb. Co.....	".....	Dressed lum.....	6	6	10	26	12	1	75	St'm.	No
818	Houghton County Progress.....	".....	Newsp'r's, etc.....	5	5	9	26	12	2	00	Gas..	.....
819	The Copper Journal.....	".....	".....	10	10	9	26	12	1	60	"	.....
820	Bosch Brewery Co.....	Lake Lind'n	Beer.....	35	35	10	26	12	2	00	St'm.	No
821	Pen'la Elec. Light & Power Co.....	".....	Electricity.....	6	6	24	30	12	2	00	"	"
822	Estate of Geo. Gregory.....	".....	Lumber.....	46	I	.....	.....	.....	.....	.....	.....	.....
823	".....	".....	Dressed lum.....	23	"	.....	.....	.....	.....	.....	.....	.....
824	Armstrong, Thielman Lumb. Co.....	S. Lake Linden.	".....	32	32	10	26	12	1	75	St'm.	No
825	Dollar Bay Land & Improv. Co.....	Dollar Bay.	Lumber, etc.....	93	93	10	26	7	2	00	"	.....
826	Hancock Chemical Co.....	".....	Powder.....	60	60	10	26	12	2	00	"	"
827	Tamarack, Osceola Mfg. Co.....	".....	Copper wire.....	100	I	.....	.....	.....	.....	.....	.....	.....
828	H. J. Vivian.....	Calumet.....	Clothing.....	15	15	10	26	12	1	57	Hand	.....
829	The Copper Co. Evening News.....	".....	Newsp'r's, etc.....	11	11	9	26	12	1	91	St'm.	No
830	I. D. Major.....	".....	Cigars.....	5	5	8	26	12	2	00	Hand	.....
831	Nicholas S. Bray.....	Laurium.....	Dressed lum.....	50	30	10	26	12	2	00	St'm.	No
832	John Meehan.....	".....	Cigars.....	5	5	8	26	12	1	70	Hand	.....
833	Columbia Steam Laundry.....	".....	Laundry.....	14	14	10	26	12	1	36	St'm.	No
834	H. E. Codd.....	Fife Lake.....	Lumber.....	15	15	10	26	7	1	60	"	"
835	Smith & Copp.....	".....	".....	18	18	10	26	8	1	60	"	"
836	J. Harry.....	".....	".....	12	12	10	26	7	1	43	"	"
837	C. B. Skellinger.....	".....	".....	17	17	10	26	9	1	53	"	"
838	Lumsden & Ward.....	".....	".....	14	I	.....	.....	.....	.....	.....	.....	.....
839	Geo. Hart.....	".....	".....	16	"	.....	.....	.....	.....	.....	.....	.....
840	F. C. Reed.....	".....	".....	14	"	.....	.....	.....	.....	.....	.....	.....
841	Perkins & Co.....	S. Boardm'n	".....	10	"	.....	.....	.....	.....	.....	.....	.....
842	Lakeside Iron Co.....	".....	".....	25	"	.....	.....	.....	.....	.....	.....	.....
843	Freeman Mfg. Co.....	Kalkaska.....	Specialties.....	108	108	10	26	12	1	60	St'm.	No
844	The Leader.....	".....	Newsp'r's, etc.....	3	3	10	26	12	1	00	Hand	.....
845	The Kalkaskan.....	".....	".....	3	3	10	26	12	1	13	"	.....
846	Kalkaska Elec. Light Co.....	".....	Electricity.....	6	6	12	30	12	1	60	St'm.	No
847	" Water Works.....	".....	Water.....	2	2	24	30	12	1	60	"	"
848	Hollister & Gray.....	".....	Lumber.....	11	I	.....	.....	.....	.....	.....	.....	.....
849	Amos C. Beebe.....	".....	Flour, etc.....	3	3	10	26	12	1	66	St'm.	No
850	W. F. Stewart.....	".....	Shingles.....	13	I	.....	.....	.....	.....	.....	.....	.....

* Running day and night.
 * Running 7 days per week.
 * Running over 10 hours per day.

Inspection Book No. 18.

Inspection District No. 5.—Concluded.

No. given factory for 1900.	Name of establishment.	Town where located.	Goods manufactured or handled.	Number of employees when running full capacity.	Number of employees at time of inspection. 1 for idle.	Number hours running per day.	Average number days per month.	Average number months per year.	Average daily wages.	Kind of power used.	If steam, is there low water alarm, and is it in good condition?
851	Kalkaska Lumber Co.....	Kalkaska...	Lumber.....	140	1	...	...	...	...	...	...
852	Spencer Bark & Lumber Co.....	Spencer....	"	13	...	...	...	...	...	...	...
853	Mancelona Handle Co.....	Mancelona..	Broom h'ndle	114	86	10	26 12	1 51	St'm.	No	...
854	" Manufacturing Co.....	"	Dressed lum..	9	5	10	26 12	1 54	"	Yes	...
855	" Hoop Co.....	"	Cheese boxes, etc.	45	45	10	26 12	1 50	"	No	...
856	Wilcox & Zipp	"	Lumber.....	12	1	...	...	...	...	...	...
857	P. G. Rogers.....	"	Shingles.....	8	...	...	...	...	...	...	...
858	Antrim Iron Co.....	"	Pig iron.....	150	150	24	630 12	1 60	St'm.	Yes	...
859	" ".....	"	Lumber.....	75	75	10	26 12	1 60	"	No	...
860	Antrim Chemical Co.....	"	Chemicals...	24	24	24	630 12	1 60	"	*	...
861	Wetgell Turning Works.....	Wetgell....	Broom h'ndle	60	50	10	26 12	1 50	"	Yes	...
862	Gazlay Bros.....	"	Lumber.....	6	1	...	...	...	...	...	...
863	Tindle & Jackson.....	Alba.....	Broom h'ndle	51	...	...	...	...	...	...	...
864	Hankey & Son.....	Boyne Falls	Flour & feed.	4	4	10	26 12	1 75	W'tr.	...	...
865	W. D. Goo & Co.....	"	Cheese boxes.	23	1	...	...	...	...	...	...
866	Wm. Mears.....	"	Lumber.....	8	"	...	...	...	...	...	...
867	St. Louis Hoop & Stave Co.....	Rapid City..	Hoops, etc.	40	"	...	...	...	...	...	...
868	Wm. Anderson.....	"	Lumber.....	12	10	10	26 12	1 50	St'm.	No	...
869	B. Pickard.....	"	Wagons	3	2	10	26 12	1 80	Hand	...	...
870	Rapid City Crumbs.....	"	Printed mat..	3	2	10	26 12	1 00	"	...	...
871	B. C. & S. E. R. R.....	Boyne.....	Repairs.....	12	12	10	26 12	2 08	St'm.	†	...
872	Wm. H. White & Co.....	"	Lumber.....	100	100	10	26 12	1 74	"	...	...
873	Wigle & White.....	"	"	23	1	...	...	...	...	...	...
874	G. Van Platen.....	"	"	25	"	...	...	...	...	...	...
875	G. M. Kerry & Son.....	"	"	12	12	10	26 12	1 50	St'm.	No	...

• Running day and night.
 • Running 7 days per week.
 * One has, three has none.
 † None needed.

DEDUCTIONS FROM WORK IN FIFTH DISTRICT.

There were 875 factories inspected during the year, which is 125 more than was inspected in 1899. Of these, 707, or 81 per cent, were running at time of inspection, there being 168 factories found idle. The ones running were averaging 10.9 hours per day, 26.1 days per month, and 10.4 months per year. This is an increase over the time worked in 1899.

When running at full capacity they would employ 26,260 persons, an average for each factory of 30.2. At the time of inspection they were employing 20,088 males and 641 females, a total of 20,729 employes, which is an average of 23.7 for each factory, or an average less full capacity for each factory of 5.5 employes. The females were employed in 118 factories, an average of 5.3 for each factory employing females. There is a slight decrease as compared with 1899 of the average number of employes for each factory.

There were 29 factories that employed children between the ages of 14 and 16 years, such employes numbering 120, an average for each factory of 4.4. There is a marked decrease in the employment of children as compared with 1899. Very few children under 14 were found at work.

The average daily pay rolls of the 707 factories that were running aggregated \$35,492.19, an average for each factory of \$50.34, or an average daily wage for each employe of \$1.71, an increase over the daily wages of 1899 of five cents per day each. The average daily wages in this district are the highest of any in the State.

These factories had been in operation an average of 9.9 years each, although 306, or about 33 per cent, of them had been established since 1895, the greatest number being in 1899, when 69 new factories were put in operation. The present year will see more new factories at work in this district than ever before, as several important manufacturing centers have developed, both in the upper and lower peninsula.

Of the 707 factories running, 660, or 93 per cent, report that business has increased in the past year; about the same number report that they are investing more capital, and 598, or over 84 per cent, say that they are giving employment to more laborers. The industrial activity as shown by the above is most promising for the future.

Steam power is used by 462 of these factories, which is 65 per cent of the whole. Twenty use electric power, 24 gasoline engines, 39 water power, 9 rent their power, and 153, or about 21 per cent, use no power.

Of the 462 using steam boilers, only 53 were provided with low water alarms, 45 of which were in good working condition, showing that nearly 90 per cent were without low water alarms. Necessary orders were made by the inspector that all boilers be at once equipped with approved alarms. The 53 alarms in use covered 10 different devices, the Reliance being the leading one used.

Orders for changes were made in 520 factories, of which 380 were connected with the low water alarms. Miscellaneous orders were made

in 140 other factories. The next inspection will show that nearly all steam boilers have been equipped with low water alarms.

The accidents reported are 17 more than in 1899, the percentage of accidents showing a slight increase. These accidents were reported from 38 factories, and are classified as 13 fatal, 10 serious, 25 severe and 18 slight. This shows three more fatal, four less serious, two more severe, and 15 more slight, as compared with 1899. The average time disabled this year was $32\frac{1}{2}$ days, while in 1899 it was 42 days. See table of accidents and deductions therefrom on pages following.

CHANGES ORDERED DURING YEAR.

DISTRICT NO. 5.

[The number refers to factory number in table.]

- 12.—Setscrews covered.
- 16.—Engine running dynamo guarded, and sprocket and chain running conveyor protected.
- 28.—Belt on sander protected.
- 36.—Separate water closets for females.
- 38.—Separate water closets for females.
- 52.—Gears on lath machine covered.
- 63.—Line shaft boxed in runway.
- 66.—Band saw wheel guarded; setscrews on grooving saw covered, and exhaust fans placed over emery wheel.
- 68.—Exhaust fans repaired.
- 77.—Exhaust fans repaired.
- 79.—Water closets repaired.
- 86.—Bolting and equalizing saw guarded.
- 95.—Setscrews on dust elevator covered.
- 106.—Setscrews on hub machine covered.
- 108.—Lower band saw wheel guarded.
- 110.—Separate water closets.
- 111.—Shifters on equalizing saws and belting protected.
- 128.—Gears on dust collector covered; setscrews on conveyor covered, and main drive belt on top of stairs protected.
- 130.—Band saw connected with blower system.
- 131.—Lower wheel of band saw protected, and exhaust fans for sanders.
- 132.—Exhaust fans repaired.
- 136.—Lower wheel of band saw protected.
- 164.—Miter gears in basement of mill covered.
- 165.—Hoods placed over equalizer saws.
- 176.—Pulley on engine guarded.
- 179.—Bolting and heading saw guarded; equalizer saw hooded; wheel and rod boxed on stove cutter.
- 181.—Float in water column repaired.
- 185.—Sprocket and chain on line rolls guarded.
- 187.—Bolting saw protected; belting on pulley guarded, and boy under 14 dismissed.
- 237.—Gears on lath machine guarded.

- 244.—Belting on knot saw guarded.
- 245.—Sworn statements filed for all children employed.
- 251.—All setscrews covered.
- 253.—Two children under 14 dismissed.
- 255.—Bolting saw protected.
- 256.—All setscrews protected.
- 257.—Setscrews on trimmer shaft boxed.
- 258.—Setscrews covered.
- 259.—Shafting on sawdust conveyor boxed.
- 260.—Sworn statements for all children employed, and pulley on resaw guarded.
- 261.—Lower wheel of band saw boxed, also shaft of veneering machine and setscrews covered.
- 263.—Lower wheel of band saw guarded.
- 265.—All setscrews covered.
- 266.—All setscrews covered.
- 267.—All setscrews covered, and lower pulley on conveyor boxed.
- 268.—All setscrews covered.
- 272.—Miter gears in basement guarded.
- 274.—All setscrews covered.
- 275.—Lower wheel of band saw covered.
- 276.—All setscrews covered.
- 277.—Cutoff saw boxed, and all setscrews covered.
- 287.—Water closets cleaned and repaired.
- 324.—Setscrews protected.
- 330.—All setscrews covered.
- 332.—All setscrews covered.
- 336.—All setscrews covered.
- 337.—All setscrews covered.
- 343.—All setscrews covered.
- 352.—Setscrews covered.
- 353.—Setscrews in basement of mill covered and gearing on hull wheel boxed.
- 358.—All setscrews covered, and chain of elevator guarded.
- 362.—Setscrews covered, and belting on edger protected.
- 368.—Setscrews covered, and shaft boxed.
- 369.—Setscrews covered.
- 370.—Setscrews covered.
- 371.—Setscrews covered; bolting saw guarded, and drive belt in engine room protected.
- 373.—Belting in basement of mill, sprocket and chain on cleaner and all setscrews protected.
- 374.—Setscrews covered.
- 377.—Gears covered.
- 378.—All gears and setscrews covered, and alarm on boiler repaired.
- 379.—Railing around pit.
- 383.—Setscrews covered.
- 384.—Two boys under 14 dismissed.
- 395.—Setscrews and gears in basement protected.
- 400.—Edger pulleys guarded.
- 401.—Setscrews covered.
- 408.—Separate closet for females.
- 411.—Sworn statements for all children employed.
- 413.—Gears on mangle covered.

- 423.—Alarm on boiler repaired.
- 429.—Setscrews covered.
- 440.—Separate water closet for females.
- 445.—All setscrews covered.
- 451.—Guards on clothespin machine repaired.
- 453.—Sworn statements for all children employed.
- 455.—Setscrews covered.
- 456.—Setscrews covered and miter gears boxed.
- 461.—Setscrews covered.
- 462.—Miter gears and elevator chain boxed, and all setscrews covered.
- 463.—Setscrews covered on cutoff saw.
- 464.—All gears and setscrews covered.
- 470.—Setscrews covered.
- 479.—All setscrews covered.
- 481.—Setscrews and gears on handle machine covered.
- 484.—Setscrews and gears in basement of mill covered.
- 486.—Drive belt guarded, and belting in basement protected.
- 493.—Miter gears boxed; shaft on grinder covered, and belting protected.
- 499.—Belting near boiler room protected.
- 504.—Setscrews covered, and line shaft boxed.
- 505.—Coupling boxed in basement, also gears on conveyor.
- 510.—Guards on gears repaired, and pulleys on lath machine protected.
- 511.—Balance wheel of engine guarded and belting on planer protected.
- 512.—Pulleys and belts in shop protected.
- 514.—Miter gears boxed, and setscrews covered.
- 528.—Pulleys on lath machine protected.
- 543.—Drive belt protected and setscrews covered.
- 547.—Air compressors guarded.
- 558.—One child under 14 discharged.
- 559.—Lower wheel of band saw protected.
- 569.—Engines guarded.
- 576.—Balance wheel of engine guarded.
- 578.—Cutoff saw guarded.
- 584.—Miter gears covered; setscrews and guides on drag saw boxed, and balance wheel of engine guarded.
- 586.—Miter gears and all setscrews covered.
- 589.—Heading saw guarded; cutoff saw boxed, and belting on drum saw protected.
- 599.—Miter gears boxed.
- 614.—Enforcement of law relative to minors working 60 hours per week.
- 617.—Enforcement of law relative to minors working 60 hours per week.
- 618.—Enforcement of law relative to minors working 60 hours per week.
- 621.—Sworn statement of child employed.
- 630.—Boy under 14 discharged, and sworn statements filed for children employed.
- 639.—Miter gears in basement covered.
- 641.—Separate closet for females.
- 642.—All setscrews covered.
- 647.—Miter gears boxed in basement.
- 649.—Boy under 14 discharged, and cutoff saws properly guarded.
- 651.—Miter gears and gears on live rolls boxed, and all setscrews covered.
- 685.—Boy under 14 discharged.
- 702.—Sworn statements for all children employed.

- 703.—Setscrews and miter gears in basement of mill covered.
- 714.—Separate closet for females.
- 717.—Railing around crank and connecting pin of engine.
- 718.—Balance wheel of engine guarded.
- 721.—Sworn statements for all children employed.
- 724.—Cutoff saw protected.
- 790.—Railing around engine.
- 794.—Alarm on boiler repaired.
- 800.—Alarms on two boilers repaired, and cutoff saw guarded.
- 812.—Gears on planer covered, and band saw protected.
- 858.—Railing placed around air compressors.

The numbers below are the factories in which low water alarms were ordered. A reference to the number given in the table will designate the name of these factories:

3, 8, 9, 12, 22, 23, 24, 27, 28, 30, 31, 34, 38, 39, 40, 41, 45, 52, 58, 60, 62, 63, 65, 68, 69, 78, 80, 86, 92, 95, 96, 97, 98, 100, 101, 102, 106, 108, 110, 111, 112, 116, 120, 124, 129, 130, 133, 134, 135, 151, 152, 153, 154, 155, 156, 157, 159, 161, 162, 163, 164, 167, 171, 174, 175, 176, 179, 182, 184, 185, 186, 187, 188, 189, 192, 194, 195, 196, 198, 199, 200, 216, 218, 219, 220, 221, 226, 227, 229, 230, 231, 233, 234, 235, 237, 239, 244, 245, 246, 251, 253, 254, 255, 256, 257, 258, 259, 261, 262, 263, 265, 266, 268, 269, 273, 274, 275, 276, 277, 278, 279, 283, 289, 290, 297, 298, 301, 304, 305, 308, 309, 310, 315, 317, 318, 319, 320, 323, 324, 327, 328, 330, 331, 332, 337, 339, 340, 341, 342, 343, 344, 346, 348, 349, 351, 352, 354, 355, 356, 357, 359, 360, 361, 362, 364, 365, 367, 368, 369, 370, 371, 372, 376, 377, 383, 384, 385, 387, 395, 396, 399, 400, 403, 406, 407, 408, 413, 414, 415, 417, 418, 421, 422, 425, 426, 428, 429, 438, 440, 441, 444, 445, 446, 447, 448, 450, 451, 452, 453, 454, 455, 456, 461, 462, 464, 465, 466, 467, 469, 470, 472, 474, 475, 476, 479, 484, 485, 486, 487, 488, 491, 492, 494, 495, 497, 498, 499, 502, 503, 504, 505, 507, 509, 510, 511, 513, 514, 515, 517, 527, 528, 536, 543, 544, 546, 547, 549, 553, 559, 563, 569, 570, 576, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 589, 592, 594, 599, 601, 603, 604, 605, 608, 609, 610, 611, 612, 613, 625, 630, 631, 632, 633, 637, 639, 641, 642, 644, 647, 651, 652, 653, 655, 659, 662, 663, 666, 667, 668, 677, 678, 685, 686, 694, 695, 699, 703, 704, 705, 706, 707, 708, 714, 715, 717, 718, 721, 722, 724, 725, 731, 735, 737, 743, 749, 750, 754, 756, 759, 760, 761, 766, 773, 778, 780, 783, 786, 788, 790, 791, 792, 793, 795, 803, 811, 812, 813, 814, 817, 820, 821, 824, 825, 826, 829, 831, 833, 834, 835, 836, 837, 843, 846, 847, 849, 853, 855, 859, 860, 872, 875.

Accidents reported in

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factories inspected in 1900.

	Was person married or single.	Cause of accident and nature of injury.	How many days disabled.	Were any wages paid during disability.	Were any benefits received during disability.	Was machinery properly guarded.	Was accident due to carelessness.
Fatal.... S	S	Killed; boiler exploded.....	m	No..	No..	"	Yes.
Serious... M	M	Broken hip; log slipped from load	m	"	"	"	"
Fatal.... S	S	Hand injured while adjusting set screw	90	No..	No..	No..	"
Serious... S	S	Arm injured in shifting belt	m	"	"	"	"
Fatal.... M	M	Killed; boiler exploded	m	"	No..	"	"
Severe... S	S	Boiler explosion; arm broken and leg burned	m	"	"	"	"
" " "	"	" " leg " badly "	"	"	"	"	"
Fatal.... M	M	" " killed	"	"	"	"	"
Serious... S	S	Right hand cut; caught on saw.....	30	No..	No..	Yes.	"
Slight... S	S	Cut fingers taking sliver from saw	10	"	"	"	No.
Severe... M	M	Bruised hip; struck by flying board	m	"	"	"	"
Slight... S	S	Piston rod broke, hurting back and hip	"	"	"	"	"
Severe... S	S	" " side hurt; injured internally	"	"	"	"	"
" " "	"	Hand cut from flying sliver	"	"	"	"	"
" " "	"	Table jumped track; cut hand	63	No..	No..	"	"
" " "	"	Lost three fingers cleaning around saw	m	Yes.	"	"	Yes.
Slight... M	M	Board broke, hurting wrists	10	No..	No..	"	No.
Serious... S	S	Broken leg; kicked belt off	m	"	"	"	No.
Severe... S	S	Table on machine stuck; cut two fingers	"	"	"	"	Yes.
Slight... M	M	Dislocated finger on turning lathe	14	"	Yes.	"	"
Severe... S	S	Stick flew from machine, hurting his breast	24	No..	"	"	No.
" " "	"	Head cut by flying piece from broken saw	m	"	No..	"	"
Fatal.... S	S	Killed while putting belt on pulley in motion	"	"	"	"	Yes.
Severe... S	S	Cut and bruised three fingers; stickler started	m	No..	No..	"	"
" " "	"	Foot hurt; caught in box	"	"	"	"	"
Serious... S	S	Arm broken; board flew from edger	42	"	"	"	No.
Severe... M	M	Leg broken by stepping on loose board on carriage	42	"	"	"	"
" " "	"	Mangled end hand cut off; struck saw	m	"	Yes.	"	Yes.
Serious... M	M	Arm broken by removing board under carrying chair	60	"	No..	"	"
Slight... M	M	Face cut by saw breaking	10	"	"	Yes.	No.
" " "	"	Cut back of hand; inattention	14	"	"	"	Yes.
" " "	"	Side hurt; struck by slab	6	"	"	"	No.
Fatal.... S	S	Killed; put foot on drive belt	"	"	"	"	"
Severe... M	M	Broken leg; fell from tramway	120	No..	"	"	Yes.
Fatal.... S	S	Killed; putting top on box of running shaft	"	"	"	"	"
Slight... S	S	Lost end of two fingers disobeying orders	30	"	Yes.	Yes.	"
Serious... M	M	Lost three fingers on shingle saw	90	No..	No..	"	"
Severe... S	S	Wrench slipped; injured wrist	21	"	"	"	No.
Slight... M	M	Hand cut; caught in gearing	m	"	"	"	Yes.
Fatal.... S	S	Killed; fell on saw	"	"	"	"	"
Slight... M	M	Face wounded from flying sliver	4	No..	No..	"	"
" " "	"	Flesh wound; fell on saw	10	"	"	"	"
Severe... S	S	Cut hand pulling sliver from saw	21	"	"	Yes.	"
" " "	"	Hand slipped; hurt two fingers	m	"	"	"	No.
Serious... M	M	Lost end of two fingers on saw	10	"	Yes.	"	Yes.
Severe... S	S	Finger cut; caught on saw	m	No..	"	Yes.	"
" " "	"	Saw slipped; cut wrist	"	"	"	"	"
Slight... S	S	Bruised; caught between cars	14	"	Yes.	"	"
Fatal.... S	S	Killed; log rolled on him	"	"	"	Yes.	"
Slight... M	M	Lost end of finger; caught in chain	38	"	Yes.	"	"
" " "	"	Bruised hand; log rolled against him	10	"	"	"	No.
Severe... S	S	Leg broken by flying machinery	108	"	"	"	"
" " "	"	Arm broken; caught in machinery	17	"	"	Yes.	No.
" " "	"	Thumb cut off on picket saw	53	"	"	"	Yes.
Slight... M	M	Lost two fingers; saw started suddenly	17	"	"	"	No.
" " "	"	Leg bruised; caught on carriage	7	"	"	"	"
" " "	"	Leg bruised; lumber slipped off car	8	"	"	"	"
" " "	"	Saw jumped, cutting end of thumb off	16	"	"	Yes.	"
Severe... S	S	Slipped; fell on elevator post, bruising thigh	7	"	"	"	"
Serious... M	M	Foot scalded; suds boiled over	m	"	"	"	"
" " "	"	Lost finger and thumb on buzz jointer	23	No..	No..	"	"
Fatal.... S	S	Killed from flying board	"	"	"	"	"
Severe... M	M	Caught in jointer; lost two fingers	76	No..	Yes.	"	"
Fatal.... S	S	Killed; boiler explosion	"	"	"	"	"
" " "	"	" " ""	"	"	"	"	Yes.

m. Still disabled at time of inspection.

DEDUCTIONS FROM ACCIDENT TABLE.

Number of accidents reported in 1900.....	66
Number of accidents reported in 1899.....	49
Per cent of accidents in 1900.....	9.3
Per cent of accidents in 1899.....	7.7
Number fatal accidents in 1900.....	13
Number fatal accidents in 1899.....	10
Number serious accidents in 1900.....	10
Number serious accidents in 1899.....	14
Number severe accidents in 1900.....	25
Number severe accidents in 1899.....	22
Number slight accidents in 1900.....	18
Number slight accidents in 1899.....	3
Average number days disabled for those injured.....	32½
Number that were native born.....	43
Number that were foreign born.....	23
Number who were married.....	35
Number who were single.....	31
Number under 21 years of age.....	12
Number under 16 years of age.....	1
Age of oldest person injured, 66 years.	
Age of youngest person injured, 15 years.	
Average age of all person injured, 30 years.	
Number of persons who received wages during disability.....	1
Number of persons who did not receive wages during disability.....	27
Number of persons not answering.....	25
Number of persons who received other benefits during disability.....	17
Number of persons who did not receive other benefits during disability.....	18
Number of persons not answering.....	18
Number of factories where machinery was properly guarded.....	48
Number of factories where machinery was not properly guarded.....	1
Number of factories not answering.....	17
Number of factories where accidents were due to carelessness.....	38
Number of factories where accidents were not due to carelessness.....	28

There were 17 more accidents reported from this district than in 1899, the percentage being slightly larger.

The fatal accidents are three more, those serious four less, the severe ones three more, while those reported as slight were 15 more. The fact that the disability of those disabled was an average of 10 days each less than in 1899 indicates the large per cent of minor accidents.

The average age of those injured was one year less than in 1899. The oldest person injured was 66 years of age, there being three others who had reached the age of 50. Twelve were under 21 and one was under 16, the youngest being 15 years of age. The report shows that 38 of these accidents were due to carelessness, and that in 48 of the factories where they occurred the machinery was properly guarded, although 17 did not answer this latter question.

Of the 53 accidents not fatal, only one was reported as receiving wages during time of disability, 25 not answering this question. Seventeen received other benefits, 18 did not, and 18 did not answer the question.

Table showing factory inspection by districts in 1900.

	Number of districts.					Totals and averages.
	First.	Second.	Third.	Fourth.	Fifth.	
Number of factories inspected.....	1,588	1,076	812	1,140	875	5,491
Number of factories running.....	1,588	1,087	722	1,065	707	5,169
Number of factories idle.....		39	40	75	168	322
Average number hours running per day.....	9.7	11.3	10.7	10.7	10.9	10.6
Average number days running per month.....	26.8	26.4	25.9	26.3	26.1	26.4
Average number months running per year.....	11.6	11.3	11.3	11.1	10.4	11.3
Number employes when running full capacity.....	58,106	43,151	37,643	33,816	26,260	198,975
Average number for each factory.....	36.6	40.1	46.4	31.7	30.2	33.4
Number of employes at time of inspection.....	46,372	34,260	33,191	26,020	20,729	160,582
Average number for each factory.....	29.2	33.1	43.8	24.4	29.4	31.0
Number less full capacity.....	11,733	8,891	4,452	7,796	5,531	38,393
Average less full capacity for each factory.....	7.3	8.3	5.5	6.8	6.4	7.0
Number factories employing females..	676	344	243	380	118	1,761
Number females employed.....	12,735	6,459	4,216	1,557	641	25,608
Average number females for each factory.....	18.8	6.2	17.0	5.5	5.3	14.5
Number factories employing children..	281	52	160	70	29	592
Number children employed.....	2,042	249	734	298	120	3,443
Average number for each factory.....	7.2	4.8	4.6	4.2	4.4	5.9
Aggregate amount of daily pay rolls..	\$66,645 33	\$48,011 84	\$46,326 68	\$41,790 40	\$35,492 19	\$238,266 44
Average daily for each factory.....	41 96	46 29	60 01	39 24	50 34	46 09
Average daily for each employe.....	1 44	1 41	1 38	1 68	1 71	1 48
Average number of years in operation	11.0	12.3	12.1	12.6	9.9	11.5
Number established in 1896.....	117	57	48	32	46	300
Number established in 1896.....	116	46	29	73	49	313
Number established in 1897.....	146	45	36	59	38	324
Number established in 1898.....	134	52	37	90	55	368
Number established in 1899.....	113	74	59	82	65	393
Number established in 1900.....	51	82	39	47	48	267
Whole number established since 1896..	677	356	248	393	301	1,965
Number where business increased in past year.....	1,132	768	596	722	660	3,878
Number investing more capital in past year.....	458	248	433	400	649	2,188
Number employing more people in past year.....	322	362	515	407	599	2,205
Number factories using steam power..	378	696	460	626	462	2,624
Number factories using electric power	136	78	86	47	20	367
Number factories using gasoline engines.....	109	83	22	59	24	297
Number factories that rent power.....	88	37	65	32	9	231
Number factories using hand power.....	42	7		6	150	205
Number factories using water power..		55	14	14	39	122
Number factories that use no power...	835	79	125	281	3	1,323
Number steam having low water alarm	299	156	121	112	53	741
Number of alarms in good condition ..	201	146	110	90	45	592
Number of alarms not in good condition.....	98	10	11	22	8	149
Number steam power not needing alarms.....	11				3	14

Table showing factory inspection by districts in 1900.—Concluded.

	Number of districts.					Totals and averages.
	First.	Second.	Third.	Fourth.	Fifth.	
Number factories using Reliance alarm	106	96	71	64	31	368
Number factories using Expansion Tube.....	93		1			94
Number factories using Sims'.....	22	17	8	16	8	71
Number factories using Kirchner's.....	2	18	26	2	1	49
Number factories using McKay's.....	17				1	18
Number factories using Lowe's.....			10	5	2	17
Number factories using Monarch.....	13			3		16
Number factories using Det. Lub. Co.....	6	3		3		12
Number factories using Soft Plug.....	6		1	1	5	12
Number factories using Reliable.....	6		1			7
Number factories using Safety.....	7					7
Number factories using Berry Float.....	6					6
Number factories using Clark Bros.....		5		1		6
Number factories using M. & L.....		5				5
Number factories using miscellaneous devices.....	15	12	4	17	5	53
Number factories reporting accidents	49	14	17	24	38	142
Number of accidents reported.....	57	17	21	40	66	201

DEDUCTIONS FROM THE FOREGOING TABLE.

Whole number of factories inspected.....	5,491
Whole number that were running.....	5,169
Whole number that were idle.....	322
Average hours they were running per day.....	10.6
Average days they were running per month.....	26.4
Average months they were running per year.....	11.3
Number of employes if running full capacity.....	198,975
Number of employes at date of inspection.....	160,582
Number of employes less full capacity.....	38,393
Number of male employes.....	134,974
Number of female employes.....	25,608
Number of these employes that were under 16 years old.....	3,443
Average amount of daily pay rolls.....	\$238,266 44
Average daily pay roll for each factory.....	46 09
Average daily pay for each employe.....	1 48
Average daily pay for each employe in 1899.....	1 39
Average number of years in operation.....	11.5
Number established since 1895.....	1,965
Largest number established in any one year (1899).....	393
Number of factories where business has increased in past year.....	3,878
Number of factories investing more capital in past year.....	2,188
Number of factories employing more people in past year.....	2,205
Number of factories reporting accidents in past year.....	142
Number of accidents reported in past year.....	201

It will be seen that 75 per cent of the factories that were running reported an increase of business during the past year; over 42 per cent report that they have invested more capital during the year, and about 43 per cent report that they are giving employment to more labor, all of which shows that the current year has been one of prosperity to the manufacturers of the State.

Fifty-one per cent of these factories use steam for motive power; seven per cent use electric power; six per cent use gasoline engines; six per cent rent their power, which is presumably steam; five per cent use hand power; two per cent use water power, and 23 per cent are factories not using power. It will be seen that steam is yet the leading power for operating factories in Michigan.

Only 28 per cent of the factories using steam had their boilers equipped with low water alarms, and about 20 per cent of these alarms were not in good working condition. A few boilers were found known as "low pressure," which needed no alarms.

The low water alarms covered many devices. The ones most in use were the Reliance, the Expansion Tube, the Sims, and the Kirchner. Other devices are popular, and new ones are constantly being invented. Future inspections will find most of steam boilers in Michigan factories equipped with low water alarms as the law provides.

COMPARISON OF ACCIDENTS WITH 1899.

Whole number of accidents reported in 1900.....	201
Whole number of accidents reported in 1899.....	199
Per cent of accidents in 1900.....	3.6
Per cent of accidents in 1899.....	4.6
Number of fatal accidents in 1900.....	34
Number of fatal accidents in 1899.....	31
Number of serious accidents in 1900.....	48
Number of serious accidents in 1899.....	71
Number of severe accidents in 1900.....	75
Number of severe accidents in 1899.....	74
Number of slight accidents in 1900.....	44
Number of slight accidents in 1899.....	23
In 1900, whole number married.....	86
In 1899, whole number married.....	111
In 1900, whole number single.....	115
In 1899, whole number single.....	88
Number who were native born.....	125
Number who were foreign born.....	71
Age of oldest person injured in 1900.....	70
Age of oldest person injured in 1899.....	70
Age of youngest person injured in 1900.....	14
Age of youngest person injured in 1899.....	14
Average age of oldest person injured in 1900.....	58
Average age of oldest person injured in 1899.....	61
Average age of youngest person injured in 1900.....	15
Average age of youngest person injured in 1899.....	15
Number under 21 injured in 1900.....	66
Number under 21 injured in 1899.....	31
Number under 16 injured in 1900.....	11
Number under 16 injured in 1899.....	9
Average age of all persons injured in 1900.....	28
Average age of all persons injured in 1899.....	30
Average number days disabled for those who were injured in 1900.....	37
Average number days disabled for those who were injured in 1899.....	41

Number who received wages during disability in 1900.....	47
Number who received wages during disability in 1899.....	50
Number who received other benefits during disability in 1900.....	89
Number who received other benefits during disability in 1899.....	98
Number accidents where machinery was properly guarded in 1900.....	171
Number accidents where machinery was properly guarded in 1899.....	184
Number where accident was due to carelessness.....	135

RECAPITULATION.

The returns show only two more accidents reported in 1900 as compared with the previous year, the percentage being less, as more factories were inspected. There were three more returned as fatal, 23 less as serious, one more as severe and 21 more as slight.

Of their social condition, the returns show that there were less married persons killed and injured in 1900 than in 1899, those who were single being about 58 per cent of the whole.

Their record of nativity shows that 62 per cent of those meeting accidents were native born, the other 38 per cent being of foreign birth.

The oldest person injured in the past year was 70 years of age, while the youngest was only 14. These ages are the same as were reported in 1899. The average age of those injured who were over 50 years old in 1900 was 58, as compared with 61 years in 1899. The average age of those injured who were under 16 in 1900 was 15 years, the same as was reported in 1899.

In 1900 there were 66 reported injured who were under 21 years of age, and of these 11 were under 16 years of age, while in 1899 there were only 31 who were under 21, of which 9 were under 16. The average age of those who were killed and injured in 1900 was 28 years, as compared with 30 years for 1899.

The average length of time disabled of those not killed was 37 days, as compared with 41 days for the previous year. This reduction is shown by the larger number of slight accidents reported this year.

Regarding wages and benefits received by those injured during time of disability, 47 received wages in 1900, as compared with 50 in 1899, and 89 received benefits other than wages, as compared with 98 in 1899, showing a slight decrease in these important items as compared with the previous year.

The reports show that in places where 171, or 85 per cent, of these accidents occurred in the past year, the machinery was properly guarded, as compared with 184, or 92 per cent, the year previous. In the accidents occurring the past year, 67 per cent of them were reported as due to carelessness.

INSPECTION OF "SWEATSHOPS"

Remarks on the Inspection

THE LAW GOVERNING THE WORK GIVEN

The Report of the Special Canvasser in Detroit

SO-CALLED SWEATSHOPS.

The legislature of 1899 added a new section to the factory inspection law, providing for the inspection and restriction of the work commonly known as "sweatshops." When compared with some of the other states, Michigan is happily free from the evil effects of this class of work, the worst features of which are generally confined to the large cities. Realizing this, early in the season the commissioner appointed Mr. A. H. Smith of Detroit to take charge of and report the condition of the work in that city. Mr. Smith's report is made a part of this chapter and will be found interesting.

IN OTHER MANUFACTURING CITIES.

The deputy inspectors in other parts of the State were instructed to make note of and report to the commissioner the amount of sweatshop work found in their respective districts, and the condition of the same. The reports show very little work in any of the manufacturing centers that can be strictly called "sweatshop work." Small amounts were being done at Jackson, Ypsilanti and Kalamazoo in the second district, some at Grand Rapids and Muskegon in the third district, and a little at Saginaw and Bay City in the fourth district. None was reported from the fifth district. In every instance the inspectors made minute and searching investigation, giving information regarding the law, and granting no permits until an inspection of the premises was made and the law complied with.

It is the opinion of the inspectors that the effects of the law will be beneficial, not only in regulating and controlling this class of work, but will serve to check the encroachment of "sweaters" from the large cities and from other states coming to Michigan to operate. It will also have an effect on the reputable manufacturers already located here, who will not care to be classed among those doing "sweatshop" work, and whose business might suffer from the odium so often obtaining with this work.

THE LAW GOVERNING "SWEATSHOPS."

AN ACT to amend act No. 184 of the Public Acts of 1895, entitled "An act to provide for the inspection of all manufacturing establishments and workshops in this State, and to provide for the enforcement, regulation and inspection of such establishments, and the employment of women and children therein," to stand as section nineteen.

Section 1. That act No. 184 of the Public Acts of 1895, entitled "An act to provide for the inspection of manufacturing establishments and workshops in this State, and to provide for the enforcement, regula-

tion and inspection of such establishments, and the employment of women and children therein," is hereby amended by adding one section thereto, to stand as section nineteen, to read as follows:

Sec. 19. That no room or apartment in any tenement or dwelling house shall be used for the manufacture of coats, vests, trousers, knee pants, overalls, skirts, dresses, cloaks, hats, caps, suspenders, jerseys, blouses, waists, waistbands, underwear, neckwear, furs, fur trimmings, fur garments, shirts, hosiery, purses, feathers, artificial flowers, cigarettes or cigars, and no person, firm or corporation shall hire or employ any person to work in any room, apartment or in any building or parts of buildings at making, in whole or in part, any of the articles mentioned in this section, without first obtaining a written permit from the factory inspector, or one of his deputies, stating the maximum number of persons allowed to be employed therein, and that the building or part of building intended to be used for such work or business is thoroughly cleaned, sanitary and fit for occupancy for such work or business. Such permit shall not be granted until an inspection of such premises is made by the factory inspector or one of his deputies. Said permit may be revoked by the factory inspector at any time the health of the community or of those so employed may require it. It shall be framed and posted in a conspicuous place in the room, or in one of the rooms to which it relates. Every person, firm, company or corporation contracting for the manufacture of any of the articles mentioned in this section, or giving out the incomplete material from which they or any of them are to be made, or to be wholly or partially finished, shall, before contracting for the manufacture of any of said articles, or giving out said material from which they or any of them are to be made, require the production by such contractor, person or persons of said permit from the factory inspector, as required in this section, and shall keep a written register of the names and addresses of all persons to whom such work is given to be made, or with whom they may have contracted to do the same. Such register shall be produced for inspection and a copy thereof shall be furnished on demand made by the factory inspector or one of his deputies: Provided, That nothing in this section shall be so construed as to prevent the employment of a seamstress by any family for manufacturing articles for such family use.

Approved June 9, 1899.

REPORT OF SPECIAL CANVASSER.

DETROIT, MICHIGAN, DECEMBER 15, 1900.

Hon. Joseph L. Cox,

Commissioner of Labor, Lansing, Mich.:

I submit herewith report of the inspections made by me under the provision of section 19 of act 233 of the Laws of 1899, relating to so-called "sweatshops."

It is to be regretted that the present force of deputy inspectors in this city is wholly inadequate to properly perform the work contemplated by the factory laws of the State, and that, therefore, the time devoted to tenement house inspection was necessarily too limited to admit of more than a comparatively superficial investigation of existing conditions.

I visited one hundred and fifty-eight places from lists furnished me by manufacturers. Twenty-one of these were found to be located in detached buildings, where machinery was used and extra help employed, and were referred to Inspector Eikhoff as coming properly under the regular factory inspection.

Eighty-nine permits were issued, in most cases to persons who performed the work in the home, under clean, sanitary and otherwise healthful conditions, and employed no one not a member of the family.

In forty-eight cases permits were withheld, chiefly through the removal of the persons named, a discontinuance of the work, or some similar reason. In one instance I found a contagious disease (scarlet fever) present, withheld a permit and notified the manufacturer to furnish the parties no more work.

I found three violations of the child-labor law, and left orders covering the same.

At two of the places visited I learned from persons employed in finishing knit goods that some weeks prior to my call they had suffered from an affection of the skin. In one case this took the form of facial erysipelas, resulting in a narrow escape from death; in the other, of eruptions of the finger ends. The length of time which had intervened precluded the possibility of tracing these cases to their source, but there is good reason to believe that the goods handled contained disease germs when received from the factory, or that, on the other hand, they were infected when returned, thereby endangering the health and lives of other workers and eventually of the purchasers.

As above stated, the conditions in most places visited were very good. In a few instances there was evidence of neglect and untidiness rather than of actual filthiness. Floors were littered with the cuttings from cloth, no doubt well charged with dust, which, while it might not in itself produce sickness, would prove a good agent for the retention and conveyance of the germs of any contagious or infectious disease which might occur on the premises.

Inquiries as to earnings of tenement house workers revealed the fact that the average is much below that of other classes of wage earners, the lowest amount reported being sixteen cents for a day of ten hours and the highest one dollar. It is also a noteworthy fact that, notwithstanding the general upward tendency of the wages of factory employes and mechanics, the general tendency of tenement house earnings is downward. The reason for this is plain when we consider that the sweatshop is the outgrowth of the fierce competition between clothing manufacturers, that the keener this competition becomes the more will the work be crowded out of the regular factories and shops into the homes of the toilers, where the cost of rent, light and heat is proportionately smaller, and in like manner from the cleanly, healthful home into the crowded, unsanitary, filthy quarters of the worst type of sweater, where every consideration of comfort and health, both of the worker and of the public, is sacrificed to the demand for a cheaper product. Indeed, it is evident that the uncleanly, unsanitary conditions in many of these establishments are due less to innate filthiness than to the physical inability to do the work necessary to keep the work rooms in proper condition and at the same time earn enough at the prices obtainable to provide even the bare necessities of life.

It can scarcely be regarded as within the province of the State to regulate wages, certainly not to take away or restrict the right of the individual to earn a livelihood in the factory or at the home, as serves his purpose and convenience best. On the other hand, it is not only within the power of the State, but is one of the first duties of government, to protect the public health, in whatever manner menaced, even to the extent of guarding the individual against the consequences of his own act. Hence, the law adopted by the legislature for the regulation of the manufacture of clothing, etc., in tenement houses, so far as it relates to the public health, is a most commendable one.

In addition to the work done locally, I have corresponded with factory inspectors in some of the older states, where the sweatshop evil has assumed larger proportions than in Michigan, and where its regulation has been the subject of legislation for years. The information thus obtained indicates that in several of these states (notably Massachusetts, New York and Pennsylvania) the worst features of tenement house work have been either wholly eliminated or reduced to a minimum. The natural tendency of this legislation is to drive the worst forms of the evil into other states not so well protected. While it is true that the conditions in Michigan are very creditable to the State, the wisdom of the legislature should be directed to the adoption of such measures as will tend to maintain the present standard, or, if possible, result in an improvement. I therefore take the liberty of suggesting some amendments to the present law, based upon provisions of the factory laws of the states referred to, which have been found by their experience to work well, and which I am convinced would prove equally beneficial to the people of Michigan.

1. That none of the work mentioned in section 19 shall be done in any room or apartment used for living or sleeping purposes, or which is connected with the room or rooms used for such purposes, and which has

not a separate and distinct outside entrance, except by members of the family dwelling therein.

2. Not less than two hundred and fifty cubic feet of air space shall be allowed for each person employed, and all work rooms shall be provided with such sufficient means of light, heat and ventilation as may be prescribed by the chief factory inspector.

3. It shall be the duty of local boards of health, health officers and physicians to report within twenty-four hours to the deputy factory inspector in their respective districts each and every case of contagious or infectious disease coming officially to their knowledge.

4. The chief factory inspector or any duly appointed deputy factory inspector shall have power to seize and take charge of all articles found that are being made or partially made, finished, cleaned or repaired in unhealthy or unsanitary places or where there are contagious or infectious diseases, in violation of the law, and may proceed to disinfect, condemn or destroy the same as in the opinion of the local board of health or health officer, the public health and safety may require.

5. Whenever it is reported to the chief factory inspector or to the State Board of Health, or to either of them, that any of the articles named in section 19 are being or have been shipped into this State, having previously been manufactured in whole or in part under unhealthy conditions, said chief factory inspector shall examine said goods and the condition of their manufacture, and if upon such examination said goods or any of them are found to contain vermin or to have been made in improper places or under unhealthy conditions, he shall make report thereof to the State Board of Health, which board shall thereupon make such order or orders as the public health and safety may require.

Respectfully submitted,

ALEX. H. SMITH,
Special Canvasser.

REPORT OF THE WORK.

CROWN KNITTING MILLS—641 St. Aubin avenue. Visited this factory and found a number of girls at work under 16 years of age, without proper certificates. Referred the establishment to Deputy Inspector Eikhoff. Permits asked for, 2; permits granted, 1; refused, 1. Reasons for refusal: Party had ceased doing the work.

J. A. ENGLANDER, shirt manufacturer—57 Adams avenue east. Permits asked for, 1; permits granted, 1.

FRANK SPIELMANN, tailor—489 Gratiot avenue. Permits asked for, 2; permits granted, 2.

HEAVENRICH BROS., clothing—113 Jefferson avenue. Permits asked for, 16; permits granted, 8. Referred 8 applications to Deputy Inspector Eikhoff, as the places referred to were found to use power and employ girls, hence were regarded as coming properly within the regular factory inspection.

J. C. HASSE & CO., merchant tailors—21 Grand River avenue. Permits asked for, 7; permits granted, 7.

THE W. H. HUSS CO., merchant tailors—51 Michigan avenue. Permits asked for, 2; permits granted, 2.

MONROE ROSENFELD CO., clothing—178 Jefferson avenue. Permits asked for, 4; permits granted, 3; refused, 1. Reasons for refusal: Party had ceased doing work.

PROGRESSIVE KNITTING CO.—46 Champlain street. Permits asked for, 72; permits granted, 32; permits not granted, 40. Reasons for not granting: Address could not be located, 8; had ceased doing work, 18; had left the city, 10; had scarlet fever there, 1; had died after application was made, 1; address could not be found, 2.

E. SCHLOSS, SON & CO., clothing—190 Jefferson avenue. Permits asked for, 22; permits granted, 11; permits not granted, 3. Reasons for not granting: Removed, 1; ceased doing work, 1; number not given, 1. Referred to Deputy Inspector Eikhoff as a regular factory, 8.

SCHLOSS BROS., clothing—184 Jefferson avenue. Permits asked for, 26; permits granted, 20; permits not granted, 1. Reasons for refusal: Had ceased doing work. Referred to Deputy Inspector Eikhoff as a regular factory, 5.

M. KING & SON, clothing—253 Gratiot avenue. Permits asked for, 4; permits granted, 2; permits not granted, 2. Reasons for not granting: Could not locate the address as given.

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